ECONOMIC CHANGES IN THE ASIAN PACIFIC RIM

POLICY PROSPECTUS

Economics Division

Foreign Affairs and National Defense Division

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LETTER OF SUBMITTAL

Honorable David R. Obey
Chairman, Joint Economic Committee
U.S. Congress
Washington, D. C. 20510

Dear Mr. Chairman:

Transmitted herein is a paper, "Economic Changes in the Asian Pacific Rim, Policy Prospectus," which you requested. We understand from your request that you intend to release this paper prior to a symposium planned for the fall.

As you have pointed out, the United States has begun to look at the dynamic economies of East Asia as both the major threat to our foreign trade balance and a potential market that might stimulate our domestic production and employment. Through an assessment of the past economic strategies and future economic prospects of these important Asian nations, this paper and the subsequent symposium of the Joint Economic Committee may provide useful and timely insights into the policy options available to decision makers in the United States.

John P. Hardt, of our Office of Senior Specialists; Dick Nanto, Economics Division, and Robert Sutter, Foreign Affairs and National Defense Division, have provided the leadership in coordinating this effort. Ray Ahearn, William Cooper, and Larry Niksch have contributed chapters to the paper; Jean F. Boone, working with Dr. Hardt in the Office of Senior Specialists, contributed to several chapters of the paper as well as to the overall coordination of the project. Donald F. Terry, Richard F. Kaufman and Steven Quick of your staff have been very helpful in providing a liaison with the Joint Committee.

Sincerely,

Joseph E. Ross
Director

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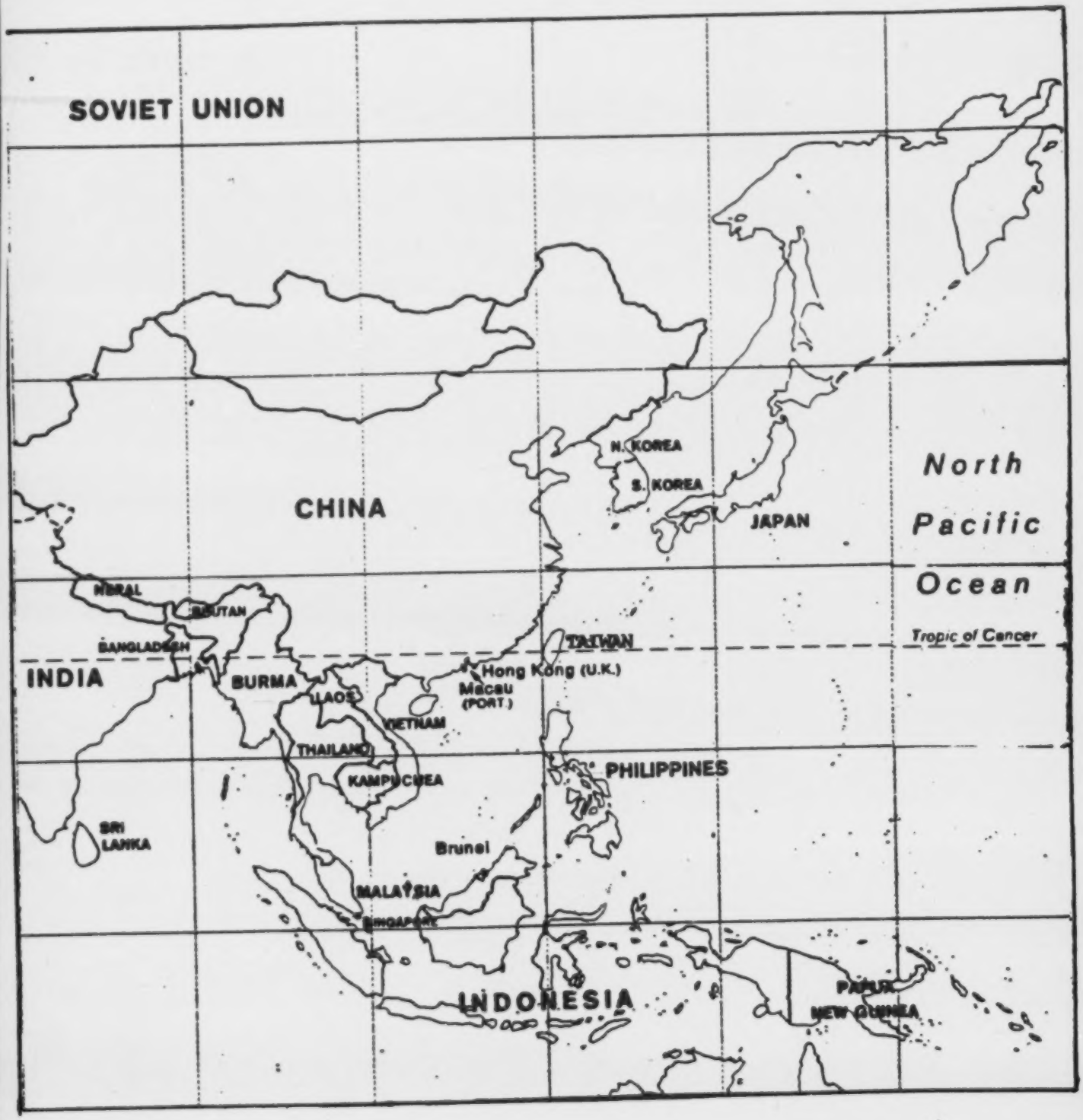
EAST ASIAN PACIFIC RIM



POLICY PROSPECTUS: DO ECONOMIC CHANGES IN THE ASIAN PACIFIC RIM POSE AN OPPORTUNITY OR THREAT FOR UNITED STATES INTERESTS? *

While United States global trade patterns have increasingly tilted toward the Pacific, the economic and commercial policies of the United States have not kept pace. No fully integrative analyses have been undertaken that take into account the implications of the dynamic Asian Pacific economic development for United States interests. Such a comprehensive assessment of the Asian Pacific economies could serve as a basis for development of clear and realistic policy options toward opening and equitably integrating these nations' economies into the world trading system and adopting policies more supportive of the long-term economic interests of the United States. Such policy options would best be based on a synthesis and assessment both of the past and of the likely economic futures for the Asian Pacific region as a whole and its key individual countries.

To help address these concerns and policy requirements, we have developed a prospectus for a Joint Economic Committee Symposium to focus on the potential economic development of the East Asian Pacific Rim over the next decade in the perspective of the four decades, 1960-2000. The Symposium topics would include the implications of long-term changes in the region for balanced commercial relations between the United States and the Asian Pacific economies, the potential role of Japan and the People's Republic of China (PRC) as economic models for the developed and developing economies of the region, and the relevant policy options for the United States. These assessments would be useful for relating policy options to estimated trends in the Pacific region to the year 2000.

Historical Perspective

Since the Joint Economic Committee began its periodic assessments of Asian economies in the 1960s, two especially significant changes have occurred: Japan and the newly industrializing countries [NICs] have developed substantial trade surpluses with the United States, and the People's Republic of China has been more successful in fulfilling its economic modernization plans than anticipated. The potential impact of these twin Asian events has caused attention to focus on the Asian Pacific Rim as the region of greatest opportunity and threat to the economic well-being of the United States. While there has been intermittent interest in assessing the East Asian Pacific economies over the past decade, the rise of trade deficits and concomitant loss of American jobs and production have given that interest new intensity, and have led to sharp debate over trade policy. Some in the United States perceive a need for more restrictive trade legislation and policy toward the Asian countries parallel to similar policy trends in Western Europe; others contend that a restrictive policy would worsen the U.S. trading position, but argue for more aggressive trade negotiation to assure equitable market conditions.

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* Prepared by John P. Hardt, Associate Director for Senior Specialists and Jean F. Boone, Senior Research Assistant, Office of Senior Specialists, Congressional Research Service.

The current confluence of economic opportunities and threats to the economy of the United States and to the world economy may be better understood and assessed if viewed in historical perspective. Over the period of the last two and a half decades, the patterns of economic development in East Asia have varied. The East Asian countries may be grouped into four categories of economic attainment with Japan enjoying the highest ranking, followed by the East Asian NICs, with ASEAN countries generally in a third tier, and China thus far the lowest, especially as measured by per capita income. In terms of total output, Japan has become the super power of the region and the aggregate growth leader of the world. There has been a remarkable change as well in the relative standing of Asian Pacific countries in global GNP and world market shares. Clearly, from a modest level in the 1960s, this region has become a preeminent base of economic power, with the potential of being either the locomotive or the anchor for the world economy. The following are major development processes that have occurred in the region since the early 1960s:

1) Emergence of Japan as a world economic superpower.

2) The dynamic growth of the East Asian Newly Industrializing Countries (NICs): Hong Kong, Singapore, South Korea, and Taiwan.

3) Development within the Association of Southeast Asian Nations (ASEAN), particularly Indonesia, Malaysia, the Philippines, and Thailand.

4) The Initiation of the Four Modernizations and Economic Openness Policy in the People's Republic of China.

Time for Asian Pacific Reappraisal of Growth and Trade Strategies

In the Asian Pacific region, Japan led the way in the rise from industrial backwardness to international economic power. The economic strategy of export priority, based on domestic consensus, single-minded export stimulation and availability of foreign markets (especially that of the U.S.) has been eminently successful. Success, however, has eroded the initial assumptions underpinning the Japanese "economic miracle" and a time of necessary reappraisal may be at hand. Japan's remarkable performance and major impact on other countries through creation of trade deficits and market penetration have heightened the foreign demands for a Japanese reappraisal of its growth model. Two negative factors of the model that relate to the interests of the United States are the high degree of United States market penetration apparently necessary for Japanese growth, and the lack of effective American and developing country access to the relatively closed Japanese market.

The NICs have adopted their own versions of the Japanese export-driven growth model, carving their own niches in the export market and developing export-oriented domestic policies. With less negative impact on the world trading community, less success to date than Japan, and different domestic imperatives, the NICS do not seem to be as close as Japan to an urgent time of reappraisal, although it may be appropriate for them as well to review the implications of their growth strategy and consider potential adjustments. Unlike Japan, whose more mature economic strength may allow it to resist world pressures for a change in growth strategy, the NICs may have to adjust to survive.

Hong Kong, Singapore, Indonesia and the Phillipines have long pursued export oriented growth policies, originally tied to the respective colonial powers during the periods of colonial rule. Now the ASEAN countries may find the Japanese formula attractive but their adoption of additional features of the Japanese export-driven growth model could be untimely in the currently imbalanced commercial environment.

Chinese economic achievements, significant by socialist economy standards, provide potential lessons to developing countries in the both communist and non-communist worlds in terms of rural, urban, science and technology, and military modernization. The relative openness of the socialist economy of China offers a formula for bridging the differences between the communist, planned economies and the market economies of the West. China's success in generating increased food production and rural industrial output and its apparent management of the balance of food and population growth, so threatening to many LDCs, makes the PRC model especially relevant for the developing economies of the region and the world market. The PRC's unique combination of modernization and openness makes the Chinese economy a potentially burgeoning market for the Western industrialized economies, and thus, China's success will be of particular interest to the United States and the rest of the economically developed West.

The reliance of the Asian Pacific countries on export-led growth has given rise to particular concern since it has helped them to gain increasingly large market shares in the United States for some labor and capital-intensive products traditionally produced in the United States. This trade crisis in the United States and other developed economies not only threatens sectors key to the foreign markets but domestic economic health as well. Thus, Asian Pacific export strategies are seen by some as an economic "threat" to the domestic economic development of many industrially developed economies as well as to their shares in the world market.

Although the image of Asian Pacific penetration of the American market is generally negative, the burgeoning markets of the Pacific Rim may at the same time serve as a positive attraction to many. The Asian Pacific region has developed more rapidly than even many optimistic Asian leaders had predicted and its foreign trade and exchanges, involving technology transfers and foreign investment, may grow ever faster in many cases than the region's rapidly expanding domestic economies. As a result, one may see considerable opportunity for increased sales, investment and mutually advantageous economic exchanges within the Pacific region. While Asian Pacific leaders promise the United States a rapidly growing market for its exports to the year 2000, American traders fear that a continuing U.S. trade deficit with Asian Pacific Rim countries will be a burden on American employment, production and price stability.

To assess clearly whether Asian Pacific developments are more likely to threaten or to provide economic opportunities for the United States, for other Pacific Rim nations, or for the world economy, a careful analysis is required of the following factors against the historical record:

- o the countries' goals of economic development over the next decade;
- o the likelihood that Asian Pacific countries will meet or exceed those goals;
- o the comparability of those outcomes with the objectives of the other developing and developed nations, and particularly with the interests of the United States.

Comprehensive assessment of the range of outcomes for Asian Pacific economic growth should include, as indicated in the chapters below, consideration of the assumptions and key variables which influence GNP, trade, and measures of economic competitiveness. Prospects for labor productivity, capital efficiency, marketing, direct investment, and other factors influencing competitiveness are considered especially useful focii of attention. Furthermore, it is deemed useful to assess such institutional factors as rates of savings, incentives, and government-private sector partnership in production and marketing, all factors that influence comparative productivity and market competition. The Joint Economic Committee Symposium could serve to initiate a process of synthesis and assessment of these quantitative projections as a useful starting point for broader political-military-economic insights. 1/

Alternative Outcomes and Their Implications for the United States Reappraisal

Based on past performance, decision makers in the United States should now take Asian Pacific projections and economic growth prospects more seriously than in the past. As the United States, in many respects, is the key partner for Asian Pacific countries, we provide many of the necessary economic growth ingredients, including a major market, assurances of political stability, and security guarantees for the region.

1/ Cf. U.S. Congress. Joint Economic Committee. Pacific Region Interdependencies. Joint Committee Print, 97th Congress, 1st session. Washington, U.S. Govt. Print. Off., 1981; Japan's Economy and Trade with the United States. Joint Committee Print, 99th Congress, 1st session. Washington, U.S. Govt. Print. Off., 1986; and China's Economy Looks to the Year 2000, Volumes I and II. Joint Committee Print. 99th Congress, 2nd session. Washington, U.S. Govt. Print. Off., 1986. See also U.S. Congress. House. Committee on Ways and Means. Report on Trade Mission to the Far East. Committee Print, 99th Congress, 1st session. Washington, U.S. Govt. Print. Off., 1986; Asia Pacific Report: Trends, Issues, Challenges. Honolulu, East-West Center, 1986; U.S. Dept. of Commerce. United States Trade: Performance in 1984 and Outlook. Washington, U.S. Govt. Print. Off., 1985. Earle, M. Mark, Jr., ed. Pacific Basin Economic Commission (PBEC) Papers. SRI International. passim. 1984-1986.

Most predictions of the economic future of the region illustrate the likelihood of growing interdependence among the economies and societies of the Asian Pacific growing and extending to the entire Pacific region and world market. Although Japan has emerged over the past generation as an economic superpower in its own right, and a powerful "engine" capable of promoting economic development elsewhere in the Asian Pacific area, Japanese progress is likely to be most effective if it complements rather than precludes a continuing strong United States role in the area. In particular, the United States will likely remain a crucial market for Asian Pacific countries seeking to sell their manufactured goods; a significant source of technology, financing and investment; and a center of education essential to the training of future Asian managers and scientists. The United States Government will likely remain a leading force in international financial organizations and will exert major influence on the policies and programs of multinational corporations so important to healthy regional development. Meanwhile, the American security presence in the region would almost certainly continue to provide a vital underpinning to the peace and prosperity of of the Asian Pacific countries.

An assessment of future implications for United States interests requires an analysis of the several potential developments that could jeopardize stability and economic development in Asia. The countries of the Asian Pacific region, including the United States, could mishandle their interdependent economic development by seeking their own parochial interests at the expense of others. Thus, increasingly strong developing countries may continue to seek to protect their markets from foreign competition, while exploiting others' markets unfairly. This, in turn, could prompt retaliatory measures, including introducing more trade restrictions that would jeopardize the trading environment so important to regional progress.

Militantly nationalist tendencies could take a different form, jeopardizing future regional stability and development. Stronger countries might attempt to assert irridentist claims against the weak (e.g., China against Taiwan); or smaller powers may assert themselves against the necessary security framework provided by American bases and United States security presence.

The economic success of the Asian Pacific region has been based on an assumption that political instability will not engulf the region. In general, the Asian economic growth successes have been facilitated by modest military burdens while political stability and regional security have been protected by the U.S. security umbrella and a continuing state of military alert in some of the newly industrializing nations--South Korea and Taiwan. Although historically, the Pacific has been a far from tranquil region, political stability and the absence of dominating security concerns will be required for continued economic success. The social contract between authoritarian regimes and a populace benefitting from economic progress may be increasingly tenuous. Limited political choice, acceptable to the populations of these countries in the past, may become less acceptable as old established leaders pass from the scene. Resolution of the economic dilemmas and the assurance of a favorable political-security environment are thus central agenda issues for the United States and the Asian Pacific Rim countries that have benefitted from past "economic miracles".

At present, the contrasts between the two spheres of East Asia are significant: the dynamic Asian Pacific Rim countries have become the economic showcase of the world while the members of the Soviet Asian alliance endure poor stagnating economies under heavy defense burdens. However, without a thorough-going reappraisal of their economic strategies, the dynamic Asian Pacific nations may find that the economic miracles have run their course.

There are starkly different economic futures now possible, and a credible scenario could be constructed for either extreme:

- o An optimistic scenario of economic dynamism would have the Asian Pacific Rim countries continuing to grow albeit with more import orientation and balanced trade with developed and developing countries alike.

- o A pessimistic economic scenario of confrontation would have East Asia, led by Japan, continuing its export driven growth strategy with rising trade imbalances, especially with the United States and Asian LDCs, resulting in a reciprocal process of trade restrictive policies and slow growth in GNP and trade.

CHAPTER 1

ASIAN PACIFIC ECONOMIC DEVELOPMENT: THE HISTORICAL PERSPECTIVE (1960-PRESENT)*

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* Prepared by Raymond J. Ahearn, Specialist in International Trade and Finance, Economics Division, Congressional Research Service.

I. INTRODUCTION

The Asian Pacific Rim has been transformed in the past 25 years into a major world center of commerce, industry, and economic activity. The region today rivals North America and Europe in many of the key indicators of economic power. The unprecedented economic achievements of the region have forced governments and firms in North America and Europe to reexamine their policies and practices to remain internationally competitive, and have led to predictions that the countries of the Asian Pacific Rim will eclipse North America and Europe as the center of world economic power and dynamism in the 21st Century.

The major countries of the Asian Pacific Rim include Japan, South Korea, Taiwan, Singapore, Hong Kong, Indonesia, Malaysia, Thailand, the Philippines, and China. These ten countries exhibit vast differences in culture, population, land size, and resource endowments. In terms of income levels, the countries can be classified into four categories. Japan, the only advanced industrialized country in the group, has a per capita income in excess of $10,000 and is the dominant economy of the region. Korea, Taiwan, Singapore, and Hong Kong, so-called newly industrializing countries (NICs), constitute a second tier of countries within the region that are on the verge of entering the ranks of fully industrialized and developed states. These four upper-middle income level countries have per capita incomes ranging from $2,000 to $6,000. Malaysia, Thailand, Indonesia, and the Philippines, four resource-rich members of ASEAN, comprise a third tier of developing countries within the region with per capita income levels ranging from $600 to $1900. China, a country with an immense population in excess of 1 billion and a per capita income level of around $300 represents a potent fourth tier of the region.

These Asian Pacific economies now rank alongside North America and Western Europe as a major center of economic vitality. In 1965, the combined Asian Pacific economies produced $183 billion in goods and services, a level 75 percent below North America (Canada and the United States) and 60 percent below Western Europe (Belgium, France, Germany, Italy, Ireland, the Netherlands, Spain and the United Kingdom). By 1983, total production in the Asian Pacific Rim economies had soared over eight-fold to $1.7 trillion, a level only 50 percent below North American production and less than 30 percent below West European production. 1/ Thus, in less than 20 years the Asian Pacific economies made substantial strides in catching up with the West.

The Asian Pacific countries reduced the income gap with North America and Western Europe by growing at breathtaking rates. Japan and the Asian NICs, in fact, have experienced the world's fastest growth rates since the 1950s. In addition, Indonesia, Malaysia, and Thailand were members of the second fastest growth group. 2/

1/ CRS calculations based on World Bank Development Report 1985.

2/ Hughes, Helen. Policy Lessons of the Development Experience. Group of Thirty, Occasional Paper 16, New York, 1985. p. 2.

Individual country growth records have shown considerable variation. As shown in Table 1, from 1965-1973 the annual average growth rate in Asian Pacific Rim countries ranged from a low of 5 percent in the Philippines to a high of 13 percent in Singapore. During this period Japan and Korea averaged 10 percent annual growth, twice the rate achieved by Germany and three times the rate achieved by the United States. Ever since the oil price rises of 1973, Asian Pacific performance has outpaced performance in other areas of the world by a wide margin. From 1973-1984 economic growth ranged from 5 percent in the Philippines to 9 percent in Hong Kong. At the same time average growth rates were dropping around the world. In the United States, Italy, and Germany economic activity slowed down to around 2 percent a year. Even Japan's slowdown to a little over 4 percent was twice as rapid as growth in these other industrialized countries.

TABLE 1. Gross Domestic Product, Selected Countries
Average Annual Growth Rate (Percent)

	1965-73	1973-1984
China	7.8	6.6
Indonesia	8.1	6.8
Philippines	5.4	4.8
Thailand	7.8	6.8
Malaysia	6.7	7.3
South Korea	10.0	7.2
Hong Kong	7.9	9.1
Singapore	13.0	8.2
Japan	9.8	4.3
Germany	4.6	2.0
United States	3.2	2.3
Italy	5.2	2.1

Source: World Development Report, 1986

If there were a continuation of current trends, by the year 2000 the Asian Pacific economies likely will account for 25 percent of the world's production and North America a little less than 30 percent. Possessing over half the world's total production, the interaction of these two regions will be a dominant force in world trade and financial flows. Although North America's ties to Europe will remain strong, the radical transformation of the Asian Pacific region has set the stage for a new era in international economic competition.

The emergence of high quality and low priced competition from the Pacific Rim, particularly from Japan and the NICs, will require Western producers to increase their presence in Asian markets to keep abreast of new product developments and to intensify efforts to remain competitive in both domestic and foreign markets. If Western producers fail to parti-

cipate actively in the growth of Asian markets, they likely will lose the ability to meet Asian competition in their home markets. 3/

The new competition from the Asian Pacific Rim is even more startling if viewed in a longer term context. From the end of World War II through the early 1960s, conditions in the Asian Pacific region were characterized by violence, revolutionary enthusiasm, strong communist parties, and numerous territorial disputes. 4/ Today greater peace, prosperity, and stability reigns in this region. Rapid economic growth has been an important ingredient driving the transformation of the region. This chapter surveys some of the major factors underlying the region's economic success, highlights the economic challenges to continuing prosperity in the region, and assesses broad factors that could affect the future growth prospects of the region.

II. SOURCES OF ECONOMIC GROWTH

There is no universal agreement on how economic growth occurs. In general, government, business, and labor all have key roles to play. Governments must adopt appropriate economic policies and provide a stable and predictable environment. The labor force needs to be hard-working, educable, adaptable, and willing to sacrifice some current consumption for future rewards. Business must be willing to risk domestic investment and stay attuned to developments in manufacturing processes and market trends and constantly try to cut costswithout sacrificing quality.

The Asian Pacific countries have been among the most successful in developing various strategies to promote economic growth. A variety of factors help explain the success of the Asian Pacific economies. The most important are indigenous to the countries of the region. Governments have adopted outward-looking trade and industrialization strategies and promoted high rates of savings. Implementation of these policies has been facilitated by a tradition of strong government ("soft authoritarianism") and Confucian values. At the same time the most successful governments have not stifled private sector initiative. Governments, rather, have cooperated with business leaders to achieve national economic objectives. National policies and attributes supportive of economic growth have been reinforced by the regions's complementary resource base and access to the U.S. market.

3/ See the chapter by Dick K. Nanto, Japan's Growth Formula: A Time For Reappraisal.

4/ Overholt, William H. The Moderation of Politics in the Pacific Basin. In The Pacific Basin: New Challenges for the United States. Proceedings of the Academy of Political Science. New York, Columbia University, 1986.

A. Export-Orientation

The most successful countries in the region have promoted industries geared to exporting. Concentrating on exporting has multiple benefits. It provides the means to overcome small domestic markets by achieving economies of scale and volume sales, imposes cost consciousness on firms, encourages private sector vitality, and eases foreign exchange limitations on development. Although outward-looking export policies clearly help a country meet international standards of efficiency and serve as a guide to proper resource allocation, they alone are not sufficient for development success.

As shown in Table 2, the Asian Pacific region's share of world exports has more than doubled from 1960 to 1984, rising from 7.5 percent to 17 percent. Japan led the way by accounting for more than half of that growth. By contrast, the U.S. share of world exports increased only 2.5 percentage points and the European Community's (EC) share dropped by 1 percentage point. Due to the expanding membership of the EC from five countries in 1960 to nine countries by 1984, the figures may tend to distort the relative decline of the EC in world trade.

TABLE 2. Asian Pacific Share of World Exports
($ millions and percent)

Year	World	Asian Pacific (w/Japan)	Asian Pacific (w/o Japan)	United States	European Community
1960	127,000 (100)	9,538 (7.5)	5,483 (4.3)	19,651 (15.5)	42,487 (33)
1969	246,000 (100)	38,394 (15.6)	25,804 (10.5)	35,107 (14)	95,204 (39)
1975	786,345 (100)	97,731 (12.4)	47,281 (6)	42,638 (12)	284,419 (36)
1979	1,502,000 (100)	257,000 (17)	110,000 (7)	182,000 (12)	577,000 (38)
1984	1,770,000 (100)	296,000 (17)	131,000 (8)	318,000 (18)	581,000 (32)

Source: United Nations Trade Data

Japan's trade and industrialization strategy from the 1950s to 1970s included trade and investment restrictions on foreign competition that could undercut domestic production. Comparative advantage was not viewed as determined by existing endowments of land, labor and capital but as something that could be induced and created through government incentives. Since the industries that are able to export are also the ones with the highest rates of productivity increase, economic growth was generated in practice through shifts in Japan's economic structure toward industries that export a sizeable portion of their output. 5/ Japan's strategy has been copied most successfully by Korea and Taiwan, but it has influenced all other countries in the region.

Although Japan today exports less than 20 percent of its GNP, a much smaller share than most other industrialized countries, foreign sales ac-

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5/ Krause, Lawrence B., and Sueo Sekiguchi. Japan and the World Economy. In Patrick, Hugh, and Henry Rosovsky, eds. Asia's New Giant. Washington, The Brookings Institution, 1975. p. 398.

count for over half of the output of industries such as autos, watches, videocassette recorders, and lathes. Since 1983 nearly all of Japan's economic growth has been accounted for by the trade sector. Moreover, success in the international market place is critical for a firm's long-term growth prospects within Japan. 6/

High economic growth rates in the Asian NICs have been propelled by a rising level of manufactured exports. In each country, manufactured exports have been growing faster than total exports and currently account for the bulk of total exports. Korea's exports of manufactures as a percent of total exports increased from 61 percent in 1965 to 92 percent in 1984. For the same period, the increase in manufactures in Taiwan was from 43 percent to 94 percent, in Singapore from 31 percent to 53 percent, and in Hong Kong from 93 to 95 percent. 7/ The increases in Korea and Taiwan were the most dramatic and coincided with each country's shift to export-led growth strategies in the early 1960s. Hong Kong started its industrialization program much earlier and being resource poor, its share of manufactured exports in total exports was already large in the early 1960s. Singapore's lower share of manufactured exports is due to its significant exports of petroleum.

Three of the NICs -- Taiwan, Korea, and Singapore -- went through an import substitution stage before adopting outward-looking growth policies. Import substitution is associated with an array of policies designed to protect and promote infant industries. Inevitably import substitution measures such as overvalued exchange rates and import quotas discriminate against exports. Due to historical circumstances, Hong Kong is the only successful developing country that did not go through an import substitution phase before adopting an export orientation. 8/

The four ASEAN countries have not matched the export growth rates of the NICs but their performances have generally surpassed countries in Latin America and Africa. ASEAN policies have not been as outward-looking as the NICs because their governments have encountered more economic and political constraints. 9/

Indonesia's rate of growth of exports has been impressive. In the 1970s, the economy grew rapidly with exports leading the way. The growth of exports, however, was less due to the adoption of outward-looking policies than to a tenfold increase in the price of oil, the commodity that accounts for 80 percent of Indonesia's total exports, and sustained capi-

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6/ Nanto, Dick K. Japan's Growth Formula: A Time For Reappraisal.

7/ See the chapter by William H. Cooper, Export-Led Development: The East Asian NICS.

8/ Chen, Edward. The Newly Industrializing Countries in Asia: Growth Experience and Prospects. In Asian Economic Development--Present and Future. University of California Press, 1985.

9/ See chapter by Larry A. Niksch, Indonesia, Malaysia, the Philippines, and Thailand.

tal inflows. Indonesia's industrialization strategy remains primarily import-substitution oriented with high-levels of protection and an often overvalued exchange rate. To lay the foundation for long-term export-led growth, the government must overcome formidable political obstacles to reducing protection and restructuring of their industry. 10/

The Philippines is similar to Indonesia in not having successfully made the transition from import-substitution to a strategy of export-led growth. Due substantially to high levels of protection and an overvalued exchange rate, predominantly capital intensive investments have been concentrated in urban areas, thereby exacerbating unemployment and regional income disparities. Efforts in the 1970s to adopt more outward looking policies have been slow to show improvement. Philippine growth in the 1970s did not become export-led as GNP and exports grew at the same rates. Efforts in the 1980s to restructure industry and end discrimination against the agricultural sector, of course, are severely constrained by political upheaval. 11/

Unlike Indonesia and the Philippines, Thailand has generally avoided excessive protection of its import-competing industries and severe discrimination against its exports of manufactures and agricultural products. With exports expanding at over 12 percent in real terms and national output growing in excess of 6 percent, Thailand experienced export-led growth between 1970 and 1982. Solid diversification of its export mix has also allowed Thailand to weather unfavorable external events such as the OPEC oil price increases and turndowns in world economic growth. This success is attributed by some to the stability and skills of Thai government "technocrats." 12/

Malaysia is similar to Thailand in exhibiting a pattern of moderate protectionism and government intervention. Exports in real terms grew at close to 7 percent between 1970-1881, a rate equivalent to real GNP growth. Exports of tin, rubber, palm oil, logs, and petroleum have spurred the growth in exports, but manufacturing has also grown rapidly. Although Malaysia has protected import-competing industries with high tariffs, it has avoided some of the most onerous elements of an import-substitution strategy such as an overvalued exchange rate. 13/

The significance of changes in China's dependence on foreign trade is much less clear than in the other Asian Pacific Rim countries. Until recently, the value of China's exports as a percentage of GNP was only about 5 percent. Since its switch in 1979 to more outward-looking policies, China's export dependence has doubled and is now comparable to the

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10/ Glassburner, Bruce. ASEAN's Other Four: Economic Policy and Performance Since 1970. In Asian Economic Development — Present and Future. University of California Press, 1985. p. 168.

11/ Glassburner, p. 173.

12/ Glassburner, p. 178 and 183.

13/ Glassburner, p. 184 and 188.

United States. Whether China's modified Soviet-type economic system is compatible with only limited integration into the capitalist world trading system, however, remains a point of contention today. 14/

B. Savings and Investment

The most successful countries in the region have also adopted policies to promote investment and domestic savings. Resources have been channeled to strengthen the industrial sector at the expense of private consumption. Some analysts maintain that an element of authoritarian government or one-party rule has helped Asian Pacific Rim governments reject political demands for greater personal consumption.

In general, a country that saves and invests more than 20 percent of its gross national product (GNP) is well on its way to self-sustaining development. The NICs and ASEAN countries increased their gross domestic savings as a share of national output from 13 percent in 1960 to 24 percent in 1982. Gross domestic investment as a share of GDP also rose from 15 percent in 1960 to around 27 percent in 1982. Foreign borrowing, particularly in Korea and the Philippines, allowed many of the countries to invest more than they saved. The record of individual countries of course varied. The ratio of investment to gross national product between 1960 and 1982 grew from 11 percent to 29 percent in South Korea, from 18 to 29 percent in Hong Kong, from 14 to 34 percent in Malaysia, from 11 to 46 percent in Singapore, from 20 to 26 percent in Taiwan, and from 16 to 21 percent in Thailand. 15/

Savings and investment activity in China and Japan have also been at extremely high levels since 1960. Since 1960 China has saved and invested around 30 percent of its national output, an exceptionally high level for a poor country. Japan has maintained during this period one of the world's highest savings and investment ratios by keeping interest rates for business loans low and those for consumers high. In addition, government spending on social infrastructure lagged behind expenditures on industrial infrastructure that would make the country more competitive internationally. 16/

14/ See Dernberger, Robert F. The State-Planned, Centralized System: China, North Korea, Vietnam. In Asian Economic Development -- Present and Future. University of California Press, 1985.

15/ Okita, Saburo. Pacific Development and Its Implications for the World Economy. In The Pacific Basin: New Challenges for the United States. Proceedings of the Academy of Political Science. New York, Columbia University, 1986. p. 24-25.

16/ See Nanto, p. 11-12.

C. Soft-Authoritarianism and Capitalism

Governments in the Asian Pacific region have played key roles in fostering development. Economic growth and catching up with the West have been important national objectives. Strong economic bureaucracies with considerable power to shape policy, including the targeting of specific industries, close government-business relations, and establishment of public sector enterprises are characteristics shared in varying degrees by most of these ten countries.

Unlike socialist countries that have attempted to direct economic activity through centralized planning, Asian Pacific governments have directed economic activity by keeping a watchful eye on prices and world markets. Although they have had a basic market orientation and have supported the development of a vigorous private sector, they have been more interventionist and active than many market-oriented governments in the West in setting economic and social policies, and in creating economic institutions and material incentives for development.

Based on a comparison of the political and economic underpinnings of high growth in Japan, Taiwan and Korea, Chalmers Johnson has pinpointed the coexistence of soft authoritarianism and capitalism as the key elements of economic success. Johnson's structural model of East-Asian high-growth systems has four elements: stable rule by a political-bureaucratic elite not acceding to political demands that would undermine economic growth; cooperation between public and private sectors under the overall guidance of consensually agreed upon national economic objectives; a government that understands the need to use and respect methods of economic intervention based on the price mechanism, and heavy and continuing investment in education for everyone. Johnson demonstrates how each of these elements exists in varying ways in the Japanese, Taiwanese, and Korean systems. 17/

Many aspects of Johnson's model arguably could be applied to Singapore, Malaysia, and Hong Kong. High-growth economic systems based on the coexistence of soft authoritarianism and capitalism provide a formidable challenge to both Soviet-type command economies and Western capitalistic systems.

D. Confucianism

The Confucian tradition, an Asian value system concerned with ethical behavior and correct interpersonal group relations, is a final indigenous attribute thought to support economic development in much of the region. Many observers believe that confucianism undergirds support for authoritarian rule, company loyalty, hard work, educational attainment, and frugality -- factors that are generally believed conducive to high growth.

17/ Johnson, Chalmers. Political Institutions and Economic Performance: The Government-Business Relationship in Japan, South Korea, and Taiwan. In Asian Economic Development -- Present and Future. University of California Press, 1985. p. 71.

Perhaps more important is the fact that acceptance of strong government and a hierarchical system contributes to the implementation of policies.

The argument also can be made that cultural characteristics are poor indicators of growth capacity. Until the 1960s, for example, Korea was regarded as an economic basket case because it was thought to be too concerned with spiritual issues to consider business activities and economic growth important. Korean and Taiwanese economic performance did not improve, in fact, until both countries abandoned import-substitution policies in the early 1960s. The case can be made that such values alone will not foster economic development in the absence of the necessary economic incentives and policies, but that they may encourage behavioral patterns that facilitate economic growth. 18/

E. Complementary Resources

While development in the region has been spurred primarily by the efforts of the individual countries, a complementary division of labor among the region's economies and growing interdependence support the economic dynamism of the region. More than half the trade of the Asian Pacific Rim countries is with the other countries of the region. 19/

Japan, as the dominant economic power of the region, has had a tremendous impact on the Pacific Rim economies. It has been felt through Japan's substantial growth in demand for raw materials, energy, and more recently light manufactures. It has also been transmitted through flows of capital, technology, and high-quality, low-cost machinery. Japan has also provided the other countries in the region with foreign aid. Perhaps most importantly, Japan has also served as an example to other countries that it is possible for Asian countries to industrialize.

The second, third, and fourth tiers of the region provide Japan with more than energy, raw materials and components to support its industrial economy. As Japan begins to lose comparative advantage in specific areas, the rest of the Asian Pacific Rim provides a platform for Japanese foreign investment in activities it can no longer do competitively at home. In addition, the rest of the region has become critical for Japan's testing of new products and learning curve strategy of development. 20/ It is not surprising that these nine countries now account for about three-quarters of all manufactured exports from developing countries. While these countries account for only about 10 percent of the world's manufactured ex-

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18/ Asia-Pacific Report: Trends, Issues, Challenges. Honolulu, Hawaii, East-West Center, 1986. p. 18-21.

19/ Drysdale, Peter. The Pacific Basin and Its Economic Vitality. In The Pacific Basin: New Challenges for the United States. Proceedings of the Academy of Political Science. New York, Columbia University Press, 1986. p. 14.

20/ Heginbotham, Erland. The Real East Asia Edge. SAIS Review, Spring 1984. p. 15-29.

ports, they also undoubtedly account for a much higher proportion of labor-intensive products. 21/

The NICs initially concentrated on labor-intensive products in the 1960s as Japanese wages and skill levels began to rise. Now they are rapidly expanding their production of more skill and capital intensive consumer durables and capital goods. This transition is now enabling other ASEAN countries and China to expand their production of labor-intensive industries. In addition, Singapore and Hong Kong serve as major financial and service centers for the region and Taiwan and Korea are increasingly active in assisting other countries in the region with direct investment and technology tie-ups.

With lower wage rates and abundant natural resources, many of the labor-intensive and processing industries are shifting to the ASEAN countries and China. To date, however, the vast majority of manufactured goods are still produced for the domestic market. This is most evident in Indonesia where less than 5 percent of total exports are manufactured goods. The other countries have shown marked improvement. Manufactured goods accounted for 49 percent of total exports from the Philippines in 1982 (up from 4 percent in 1960), 29 percent in Thailand (up from 2 percent in 1960) and 23 percent in Malaysia (up from 6 percent in 1960).22/

F. Access to the U.S. Market

The most important contribution the United States has made to foster the Asian Pacific regional division of labor has been to serve as its very best customer. 23/ The United States is the number one market for Korea, Japan, the Philippines, Singapore, Taiwan, and Hong Kong and is an important market for the rest.

U.S. imports from the Asian Pacific Rim are predominantly manufactured goods. U.S. imports from Indonesia, which consist primarily of oil and rubber, are the major exception. Japan's biggest exports, of course, are cars, consumer electronics, office equipment, computers, and steel. The Asian NICs as they move up the technology ladder are now competing with Japan for market share in autos and sophisticated consumer electronics. The ASEAN countries and China mostly export labor-intensive products including clothing, textiles, and electrical components.

Imports from Asian Pacific Rim countries totalled $130 billion in 1985 or more than 35 percent of total U.S. imports. This represents a more than 20 percentage point increase since 1960 when imports from the region totalled $2 billion. Some portion of the increase is accounted for by U.S. multinationals mostly involved in production of electronics or processing crude oil and natural resources.

21/ Drysdale, p. 14.

22/ East-West Center, p. 24.

23/ Okita, p. 27.

By contrast, U.S. exports to Pacific Rim countries as a percentage of total U.S. exports have increased only 9 percentage points, from 14 percent of total U.S. exports in 1960 to 23 percent in 1985. As a result, the region's economies today account for more than half of the $150 billion global U.S. trade deficit. 24/ While traditionally the United States has tolerated a relative inequality in market access opportunities, growing trade deficits have resulted in pressures to assure that reciprocal market opportunities exist. This has meant that the Asian NICs and ASEAN countries will not have the same advantage Japan enjoyed -- U.S. toleration of a development strategy based on protected domestic markets.

III. ECONOMIC CHALLENGES

Each of the Asian Pacific economies faces economic challenges to a continuation of high growth. Japan, the NICs, and China all face major turning points and great uncertainty in their efforts to develop economically. The ASEAN countries, particularly Indonesia and the Philippines, remain subject to deep-rooted economic and political development constraints. In most general terms, the challenges result from changing conditions that will make it difficult for governments to duplicate the high growth experience of the 1960s and 1970s. Less willingness by the United States and Europe to allow Asian Pacific countries to adopt and maintain export-based growth with domestic protectionist policies, and predictions of slower world economic growth for the remainder of the 20th Century also will have important effects on growth in the region.

A. Japan

Dealing with a rising level of foreign protectionism is Japan's number one challenge. Japan's exports of a broad spectrum of manufactured goods have caused significant disruptions in its two most important markets, the United States and Europe. The disruptions have been met with formal and informal trade barriers. Some analysts estimate that nearly 60 percent of Japan's exports now face foreign restrictions. 25/

Restrictions on Japan's exports have also been a reaction to Japan's composition of trade. As a resource-poor country, Japan has concentrated on producing high-value-added manufactured goods. While nearly all of Japan's exports are manufactured products, less than one-fourth of Japan's imports are manufactured goods. In contrast, manufactured goods account for at least 50 percent of total imports of all other advanced industrialized countries. Trade tensions have been exacerbated as a result.

24/ CRS calculations based on Department of Commerce data.

25/ Woronoff, Jon. Japan's Structural Shift From Exports to Domestic Demand. In U.S. Congress. Joint Economic Committee. Japan's Economy and Trade with the United States. 99th Cong., 1st sess., Washington, 1986. p. 67.

A panel of advisers to Prime Minister Nakasone recently submitted a report (the Maekawa Commission Report) detailing the need to alter Japan's export-oriented trade structure. The report outlines principles for transforming Japan's economy to growth based on domestic demand. Such a transformation would require substantial increases in domestic expenditures on leisure and housing. The possibilities for restructuring, however, are constrained by efforts to reduce budget deficits and declining government control over the activities of its aggressive exporters. Without a fundamental transformation, Japan is likely to encounter increased protectionist pressures in the future.

B. NICs

Similar problems confront the Asian NICs. 26/ The threat of protectionism has grown in proportion to the success of their export-oriented industrialization strategies. Due to Japan's success, they also face intensified scrutiny from the United States and Europe to ensure that their competitive success is not facilitated by unfair trading practices. Less dependence on foreign trade in general and more diversified industrial structures are key challenges facing the NICs.

The economic transformation of South Korea and Taiwan, in particular, has been spurred by export-oriented industrialization strategies similar to Japan's. Import protection, the screening of foreign investments, and export promotion incentives in both countries have been important tools in efforts to foster the development of designated industries. The strategies have helped them overcome the limitations of the small size of their domestic markets, but also increased their trade-dependence to record levels.

Both countries carved out a niche originally as low-cost and labor-intensive manufacturing centers. Rising labor costs prompted authorities in both countries to emphasize the development of more capital-intensive and technologically sophisticated industries. A very high dependence on the U.S. market (about one-third of South Korea's total exports and one-half of Taiwan's go to the United States) has prompted efforts to diversify export markets. Current prospects for market diversification, however, are not favorable in light of the rapid appreciation of the yen vis-a-vis the dollar (the currencies of Taiwan and South Korea are pegged substantially to the dollar), thereby increasing the attractiveness of their products relative to Japan's in the U.S. market.

In recent years, as both countries' trade surplus with the United States has escalated rapidly, U.S. pressures designed to increase the pace of trade liberalization in Taiwan and South Korea have intensified. Overcoming bureaucratic and private sector resistance to an accelerated liberalization schedule will be increasingly critical for South Korea and Taiwan if they are to maintain access to foreign markets in the future. Un-

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26/ This sections draws heavily on the East-West Center report, p. 22-24.

like Japan, neither country has the luxury of inattention from U.S. business and government.

In addition to being vulnerable to foreign restrictions and pressures to liberalize their markets, South Korea and Taiwan remain vulnerable to rising commodity prices or supply interruptions. Although both economies adjusted to the two oil price shocks in the 1970s by increasing exports, greater sensitivity of their major trading partners to future export surges could undermine a similar strategy.

Hong Kong and Singapore are the two NICs closest to achieving fully developed market economy status. Currently, both of these city-states enjoy per capita incomes in excess of $6,000, a level equivalent to Italy's and greater than Ireland's and Spain's.

Although both countries have developed into major regional centers for finance and services, their development strategies have varied. Hong Kong's economic growth has been guided by free trade, a lack of government intervention, and low tax and conservative fiscal policies. Having little arable land and virtually no natural resources, Hong Kong depends on trade for survival. As a major center for investment, trade and contact with China, Hong Kong stands to benefit from China's new outward orientation and economic growth.

The government of Singapore has been much more heavily involved in economic development, establishing state corporations and in setting wage rates and labor regulations. As a predominantly service-oriented economy involved in shipping, banking, insurance, storage and distribution, Singapore has expanded its traditional reliance on services by rapidly industrializing. Shipbuilding and repair and electronics have been among the leading manufacturing sectors. New higher-technology industries such as aircraft components and computer disc drives are currently being encouraged. Unlike Hong Kong which has relied primarily on domestic capital to support industrial investments, Singapore has actively and successfully attracted foreign investment.

Both Hong Kong and Singapore have experienced economic set-backs in recent years. Efforts to control uncharacteristic budget deficits in Hong Kong from 1983-1985 led to a steep cutback in government expenditures. This cutback, in turn, has hurt Hong Kong's overall growth with the construction industry being particularly affected. Investor confidence was also adversely affected for a period of time by prolonged British-China negotiations over the colony's future. Even with the completion of the negotiations, China remains a major worry. China's economy is running a substantial global trade deficit and has been hurt by falling oil prices. Because China is Hong Kong's second major trading partner, an economic downturn there would have significant effects on Hong Kong's economy.

For a period Singapore benefitted from Hong Kong's difficulties, but by 1985 economic growth had ground to a halt. Industries such as petroleum-refining, electronics, and shipbuilding were all adversely affected by worldwide gluts in supplies. In addition, rising costs, particularly undercut some of Singapore's competitiveness. To up-grade its small economy to meet growing international competition, particularly from other

NICs, Singapore is striving to move beyond a production base to becoming an international total business center. Along these lines, the government is attempting to attract companies to establish operational headquarters, which are responsible for subsidiaries throughout the Pacific Rim. Greater emphasis is also being placed on promotion of services such as construction firms building hotels in China or salvage firms operating in the Middle East.

The Asian NICs, in short, are all in the midst of transforming their economies to a higher stage of development. Policies developed to accomplish this transformation will have to take account of different economic interests and sensitivities of their major trading partners than prevailed in the 1960s and 1970s.

C. ASEAN

In contrast to the resource-poor NICs, economic development in Indonesia, Malaysia, the Philippines, and Thailand has been bolstered by the availability of raw materials and primary products. 27/ Products such as petroleum, tin, rubber, palm oil, coconut products, rice, sugar, and tapioca have been the mainstays of their economies. Coping with price instability for these products is a perennial economic challenge for these countries.

Growth rates in the ASEAN-4 countries, as noted earlier, have not been as spectacular as in the NICs. This can be attributed in part to their larger populations, larger agricultural sectors, and to their more pluralistic societies. Nevertheless, their growth rates have outpaced most other middle-income developing countries. Between 1963 and 1983, Malaysia, Thailand, and Indonesia all averaged around 7-8 percent annual growth rates. The Philippines record of 5 percent was less impressive but still quite respectable compared to any other region of the world. Since 1983 the Philippines record, of course, has been undermined by political and economic turmoil.

Agriculture's share of national income has shown impressive declines in each of these countries. The largest drop has occurred in Indonesia. The share of national income contributed by agriculture was close to 60 percent in 1963 but by 1983 it had dropped to 26 percent. Similar declines for the Philippines were 26 percent to 22 percent, for Thailand 35 to 23 percent, and for Malaysia 30 to 21 percent. Despite the declines, half or more of the labor force in each country is still employed in agriculture.

Although agricultural production has expanded faster than population growth, only Thailand is self-sufficient in food. Greater self-sufficiency is required in order to shift resources, including the growing labor force, into the manufacturing sector. As wage rates rise in the Asian

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27/ This section draws heavily on the East-West Center report, p. 24-26.

NICs, the labor-intensive manufacturing sector of the ASEAN economies should become more competitive.

To date, however, the vast majority of manufactured goods produced in these countries is still sold in domestic markets. Despite attempts in the Philippines and Indonesia to promote the export of manufactured goods, protection of inefficient industries still undercuts competitiveness. Development of more outward-looking economic policies has been thwarted in the Philippines by corruption and political turmoil. In Indonesia the high value of the rupiah resulting from petroleum exports has undermined its manufacturing competitiveness.

Protection of inefficient industries has been less a problem in Thailand and Malaysia. Both countries try to exploit their labor cost advantage by emphasizing light industries such as textiles and electronics. Malaysia in particular has emphasized exporting from free trade zones and now leads the world in chip assembly partly because three large U.S. multinationals have plants there. Both countries are also promoting large-scale industrial projects. Malaysia hopes to become an automobile manufacturer and Thailand is building a major industrial center along its eastern seaboard.

As industrialization progresses, the ASEAN-4 will have to make major investments in industrial infrastructure, including transportation, communication, and utilities. The countries have already made significant strides in social welfare improvements. Education, medical care, and other public services have all been strengthened. At the same time, the benefits of economic growth have not been shared as equitably as in other fast developing Asian Pacific countries.

In sum, all four ASEAN countries face difficult obstacles in matching past growth rates in the decades ahead. Indonesia and the Philippines appear to have the most difficult challenges. Indonesia must reduce protection of its industrial sector and hope that world demand for oil and its traditional export commodities recovers. The Philippines must also restructure its domestic industry, a task made even more difficult by domestic political turmoil. On the other hand, Thailand and Malaysia both have protected their industrial sectors less and have a competent corps of technocrats to help cope with future challenges.

D. China

China, the Pacific Rim's fourth tier, stands in sharp contrast to the other economies of the region. 28/ Viewed in absolute terms, China is already an industrial giant. With a GDP close to $300 billion, China is the eighth largest economy in the world. But its per capita income of around $300 also makes it one of the poorest countries in the world. Major economic reforms initiated in 1979 aim at increasing China's national income to $1 billion by the year 2000. If China can achieve this objective and

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28/ See chapter by John P. Hardt and Jean F. Boone, PRC Modernization and Openness -- A New LDC and Socialist Model For the Pacific.

limit its population increase, then living standards will be increased two to three fold in only two decades.

Restructuring of the economy began under Deng Xiaoping in 1979. The plan was to redirect development from its previous emphasis on heavy industry and defense to agriculture, light industry, science and technology and defense. Rural and agricultural reforms initiated in 1979 have successfully expanded food production and controlled population growth. This success has encouraged the leadership in 1984 to begin a systematic attempt at urban reform and industrial modernization entailing a shift from central, mandatory planning toward local autonomy and financial planning. Market forces combined with indicative planning are to guide an increasingly large portion of economic activity. In 1985, a "technology policy" was announced in order to provide a more effective organization for scientific and research development. Modernization of the military is underway as well, but remains a low priority.

Simultaneous with domestic reforms, China is also opening its economy to the world market. Total trade has grown rapidly, from $21 billion in 1978 to $50 billion in 1985. Exports now account for almost 10 percent of China's GDP, a doubling in just five years. Half of China's exports are now purchased by Asian Pacific countries and one-third of China's imports come from Asian Pacific countries. In addition to trade, China is also actively seeking foreign capital, technology, and managerial skills by creating Special Economic Zones (SEZ). By the mid-1980s, total foreign investment was estimated to be around $3.5 billion.

China's domestic reforms and more outward-looking trade and investment policies confront continuing challenges. Many foreign firms doing business in China complain of soaring costs, arbitrary tax and tariff levies, inadequate and expensive labor and numerous other annoyances.29/ Transportation, communications, and energy constraints pose serious obstacles to success. Vested domestic interests, including the state and party bureaucracy, are resistant to greater openness. The next few years will be crucial in determining the extent to which reforms will be implemented. The economic results of current experiments will be an important factor in determining the future course of China's economic system.

IV. OUTLOOK

Both internal and external factors will influence the economic future of the Asian Pacific region. Internally, national authorities will have to adopt and implement policies that lead to efficient resource allocation if high rates of economic growth are to be sustained. A number of Asian Pacific governments have demonstrated the capacity to promote economic growth in the past by blending a form of "soft authoritarian" government with healthy dosages of capitalism. If past is prologue, the probabilities are excellent that this unique combination of factors will allow Asian Pacific economies to outperform their major competitors regardless

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29/ Firms Doing Business in China Are Stymied By Costs and Hassles. Wall Street Journal, July 17, 1986. p. 1.

of the external environment. This is because, in the words of Chalmers Johnson, they have "managed to adapt more effectively and more rationally to any given environment than either their absolutist or their purely capitalist rivals." 30/

Political instability remains the major internal factor that could undermine favorable economic predictions for the region. In many of the Asian Pacific states "the social contract between authoritarian regimes and a populace benefitting from economic progress may be increasingly tenuous . . . as old established leaders pass from the scene." 31/

How well the Asian Pacific economies perform in absolute terms, however, will also depend substantially on the external environment. Growth in world trade and market access conditions, particularly in the United States and Japan, will be a major influence on the level of future economic growth rates in the region.

The United States is now running massive global and bilateral (particularly with Japan) trade deficits that are unsustainable in the long run. Although the causes of U.S. trade deficits lie in domestic economic policies, there is a growing tendency in the United States to focus on unfair foreign trading practices as a significant cause. Proposals to retaliate against unfair trade practices have received serious consideration and some, if implemented, could precipitate a spiral of trade restrictions.

In contrast to the United States, Japan is running record global trade surpluses. As total spending in Japan continues to fall short of total output, its excess savings is exported to the rest of the world. Although this pattern does contribute to enhancing global economic efficiency, it increases political tensions and in the long run is unsustainable. Greater efforts by Japan to consume more at home and make its economy more accessible to imports are needed to avoid an outbreak of protectionism directed at Japan.

Given these factors, a high-growth scenario for the region can be predicted if the United States is able to gain control of its trade deficit and Japan becomes more accessible to imports. Trade disputes undoubtedly will continue to occur but growth rates in the region will be higher than elsewhere. If this occurs, the region by the year 2000 will have almost caught up to North America in combined income. On the other hand, if the U.S. response to its trade deficit becomes protectionist and Japan's market remains resistant to imports, trade and growth in the region could be severely disrupted, thereby undermining the recurrence of export-led growth. 32/

30/ Johnson, p. 89.

31/ Hardt, John P., and Jean F. Boone. Policy Prospectus. p. 5.

32/ Okita, p. 31.

CHAPTER 2

JAPAN'S GROWTH FORMULA: A TIME FOR REAPPRAISAL*

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*Prepared by Dick K. Nanto, Specialist in International Trade and Finance, Economics Division, Congressional Research Service.

Of the nations in the Asian Pacific Rim, Japan has throughout the twentieth century led the way in the rise from industrial backwardness to international economic power. Its relentless ascent from the unconditional surrender on the deck of the U.S.S. Missouri through reconstruction and two decades of soaring economic growth to become the second largest economy in the world has not only made the Japanese the nouveau riche, but it has forced industries in other nations to adjust their own business strategies to cope with the competitive challenges from this seeming economic juggernaut.

This paper provides a selected survey of Japan's economic performance over the past 25 years, looks at some lessons for currently industrializing countries, and then explores prospects for the future and implications for the United States. The purpose of this survey is to develop hypotheses and an agenda for change. (More detailed studies are listed in the footnotes.) Some major conclusions are:

-- During the 1960s and 1970s, Japan experienced unusually rapid economic growth that transformed its economy into the second largest in the world.

-- Japan's growth formula included macro- and microeconomic policies as well as an ability to pursue its own interests without complaints from abroad.

-- Macroeconomic planning and policy provided the framework for rapid economic growth and raised the expectations of businesses.

-- Microeconomic policy included following a model of import substitution/export promotion industrialization whose major objective was to develop competitive industries across the industrial spectrum.

-- The method by which industrial policy was carried out involved targeting the next generation of potential export industries and inducing their growth through a myriad of decisions on items such as import tariffs, technology licensing, and finance but usually did not include direct government ownership or massive subsidies.

-- A key element of building strong industries was to shield them from foreign competition in their infancy but force them to face fierce competitive battles at home.

-- Some of the favorable conditions Japan enjoyed while it industrialized were a long period of time over which to grow, its small size in world markets and

tolerance by more advanced nations of its policies, its ability to acquire advanced technology at a low cost, a long period of world economic expansion, and low requirements for national defense.

-- Japan is now at a new uncertain age that seems to require a complete rethinking of its growth formula. The elements that have changed include heightened protectionism directed at its exports, the growing international character of its economy, the diminished role of government, and the aging of its society.

-- In April 1986, a blue ribbon advisory group reported that the time had come for a major shift in Japan's economic policies and way of life that would require a reduction in dependence on exports and an improvement in the quality of life of the people.

-- The outlook for Japan is for continued growth at about 3 percent per year with the merchandise trade surplus peaking within a year or so. The appreciating yen could put the country in a position similar to Germany's -- a country making products of quality but whose prices are high because of a strong currency. If the yen appreciates to 100 yen per dollar, Japan's GNP would reach approximately $3 trillion with per capita income and wages about twice the American level.

-- Japanese businesses will continue to be major competitors in world markets. American businesses need to adopt some Asian strategy to cope with this competition, and U.S. policy deliberations also should include consideration of the "Japan effect."

I. BACKGROUND

Japan founded its economic strength on its people. Lacking natural resources or a sizable land mass, the country has combined labor, capital, and entrepreneurship to gain a comparative advantage in a range of industries. In some cases, these industries have become world leaders in product development and in manufacturing process improvements. Japanese firms hold major market shares in products such as machine tools, cameras, watches, automobiles, television receivers, and videocassette recorders and still manage to capture nearly half of the new orders for commercial ships. They lead in world steel technology, and their computer industry, which has broken through the dominance of the IBM corporation domestically, is pressing to narrow the American lead in overseas markets.

In the process of becoming a world-class economic power, Japan has racked up massive trade surpluses with other countries of the world. Its $56 billion overall trade surplus in 1985 -- including a

$50 billion bilateral surplus with the United States alone--combined with a similar amount in finance capital that flowed into world investment markets are only indicative of the influence the Japanese economy has on life outside its borders.

For American businesses, moreover, the crucible of competition is shifting from the domestic U.S. marketplace to the East Asian rim. In a variety of products, particularly consumer goods and business equipment, if Western business planners do not keep abreast of new product developments in Asia, they are likely to find themselves confronted by formidable foreign competition offering products still on their own drawing boards -- as was the case with numerically controlled machine tools. If U.S. firms do not contain costs of production or if they allow slippage in quality control, they are likely to face competitive products from Asia not only with lower prices but of higher quality -- in automobiles, for example. If American firms do not maintain their market share in Asian markets, it is likely only a matter of time before they will be facing similar shrinkage of market share at home -- in personal computers, for example.

This competition from the Asian Pacific Rim is breaking established patterns and upsetting some economic interests. Much as was the case with the oil crises in the 1970s, this competition is galvanizing U.S. society and shaking it out of its lethargy. The oil crises exposed the waste in energy use throughout the American economy and the vulnerability caused by dependence on unstable sources of petroleum. Once the painful adjustments were made, however, society became much more efficient and prudent in its use of energy, and supply sources were broadened.

The new economic competition from the Asian Pacific Rim, particularly from Japan, has had a similar effect on the American economy. It exposed several areas of weakness in manufacturing practices, government economic policy, labor relations, and business strategies. While the adjustments required have not been without pain, once they have been made, the results should contribute to a society much more healthy in the long-term, more competitive, and better not only for the consumer but for businesses as well. 1/

1/ For some examples of the effect of Japanese competition on U.S. business see: Schonberger, Richard J. Japanese Manufacturing Techniques. New York, The Free Press, 1982. Numerous articles in the Harvard Business Review, such as: Whitney, Daniel E. Real Robots Do Need Jigs. Vol. 64, May-June, 1986. pp. 110-116. Or Hamel, Gary and C. K. Prahalad. Do You Really Have a Global Strategy? Vol. 63, July-Aug, 1985. p. 139-48.

II. JAPAN'S GROWTH FORMULA

A. Historical Development

Until the 1960s, Japan was primarily preoccupied with reconstruction and recovery from the devastation of World War II. Despite intense Allied bombing and a half-hearted effort to use Japanese industrial capacity as reparations for other Pacific nations, Japan was able to restore most of its industrial strength. The process, however, took more than a decade. The country did not recover its prewar level of national production until about 1954. If the prewar peaks of 1917 and 1937 are extrapolated forward, Japan did not recover the growth lost during the war until 1962, more than fifteen years after the war had ended. 2/ Japan's true postwar economic growth, therefore, extends from the early 1960s.

As Japan stepped into the 1960s, government leaders and economic planners proposed to double national income over the decade. The economic blue print called for a growth rate of 7-8 percent per year to raise gross national product from 20 to 40 trillion yen ($111 billion). While such rapid expansion was virtually unprecedented in the modern history of major economies, Japan had actually been logging such rates of growth during its recovery period, although such rates were expected to fall once recovery and rehabilitation were complete.

Much to the delight of the ruling Liberal Democratic Party, however, the forecasts of the planners could scarcely keep up with actual economic growth. 3/ The economy expanded so fast that a new plan had to be announced for 1964-68. And before the decade ended, yet two more new plans had to be constructed. Actual real growth rates over the period averaged 11 percent per year.

While the domestic economy surged forward, parallel performance was being recorded in the export sector. During the 1960s, the dollar value of Japan's exports grew at an average annual rate of 16.9 percent (before adjusting for inflation), more than 75 percent faster than the average of all non-Communist countries. By 1970, Japan's exports had risen to account for 6.8 percent of all free-world exports, up considerably from the 3.6 percent in 1960. 4/ By 1965, moreover, surpluses began to appear in the country's merchandise trade accounts, including a developing bilateral surplus with the United States.

2/ Ohkawa, Kazushi and Henry Rosovsky. Japanese Economic Growth. Stanford, Stanford University Press, 1973. p. 29-30.

3/ Watanabe, Tsunehiko, "National Planning and Economic Development: A Critical Review of the Japanese Experience," Economic Planning, v. 10 (1-2), p. 21-51.

4/ International Monetary Fund. International Financial Statistics, May 1977. p. 56-57.

As the 1970s began, the world began to take note of the "emerging Japanese superstate." 5/ The country's economy continued to rush forward at record-setting, double-digit rates until the Arab oil embargo of 1973 (followed by world-wide shortages of food and basic minerals) slammed on the brakes. Suddenly Japan's industries were exposed to the same economic disruptions faced by other nations of the world, and growth rates dropped from 9 percent per year in 1973 to a negative 1 percent in 1974 before recovering to 5 percent over the second half of the decade and then falling to 3-4 percent in the 1980s.

The economic shocks of the 1970s reined in Japan's surging growth rate to a level comparable to that of any other industrialized country. The phenomenal postwar growth spurt had ended.

Over the three decades of rapid growth, however, the economy had been transformed. A child born in 1945 entered a society nearly starving on a diet consisting mostly of rice gruel mixed with corn received as food aid from the United States. By the time the child reached 10 years of age in 1955, per capita income would have risen to about $22 per month (compared with $10 per month in 1940). By age 20 in 1965, it would have climbed to $75 per month, and then to $366 by age 30 in 1975. By age 40 in 1985, per capita income would have risen to more than $900 per month or almost $11,000 per year.

Income levels for Japanese now are slightly below but comparable to those in the United States and Western Europe. With its GNP of $1.3 trillion, roughly the size of that of the Soviet Union, Japan has joined the exclusive club of the developed nations of the world.

This phenomenal economic experience by Japan did not occur in isolation. The country relied heavily on an expanding world economy and liberalizing export and import markets. The voracious appetite of Japanese industry for raw materials and petroleum forced it to seek stable supplies and stimulated development of mining and mineral industries in other countries. 6/ Coal from Appalachia with iron ore from Australia were used to produce steel. Crude oil from Indonesia and Brunei supplements that from the Middle East. And the Sino-Japanese trade agreements were founded on the concept that Japan would buy coal and oil from China in exchange for manufactured products. 7/

5/ Kahn, Herman. The Emerging Japanese Superstate, Challenge and Response. Englewood Cliffs, N.J., Prentice Hall, 1970. p. 174.

6/ Vernon, Raymond. Two Hungry Giants: The United States and Japan in the Quest for Oil and Ores. Cambridge, MA, Harvard University Press, 1983.

7/ Nanto, Richard K. and Hong N. Kim. Sino-Japanese Economic Relations. Journal of Northeast Asian Studies, Vol. 4, Fall 1985. p. 29-47.

Export demand also was important. Yet the widely held perception both within and without Japan that the primary force for development has been the drive to "export or perish" is not completely correct. Japan actually relies less on export demand than many other nations of the world. In 1985, for example, it exported 17 percent of its GNP compared with 24 percent for France, 36 percent for West Germany, 30 for the United Kingdom, 30 for Canada, and 63 percent for the Netherlands. Japan exports about the same percent of its GNP as Australia, and few would characterize Australia as being export-led. The United States at 7 percent, however, exports a considerably smaller share of its GNP than Japan. 8/

In terms of overall markets, therefore, Japan is less dependent on foreign trade than many other industrialized countries of the world. The vast bulk of demand has been domestically generated. For specific industries, however, international export markets are extremely important. Foreign sales account for about half of the output of the Japanese automobile industry, and more than half of the production of watches, videocassette recorders, and lathes.

During the 1980s, moreover, the lack of growth in domestic markets has forced producers to look abroad. Nearly all of Japan's economic growth between 1983 and 1986 has been accounted for by increasing net exports. Recent economic growth, therefore, has been export-led.

Export markets, moreover, have allowed Japanese corporations to continue their high growth policies even after domestic markets became saturated. And success in export markets has been the final measure of the viability of a firm or product line in Japan. Furthermore, without exports there could be no imports. Without imports, the country certainly would not perish, but its standard of living would have to be drastically lower.

B. Behind the post World War II boom

Just as Japan's transformation from an exporter of silk stockings to computer systems did not occur in international isolation, Japan's individual businesses did not move from making shoddy imitations of Singer sewing machines to Mazda RX7s without some government support. The government's role came into play primarily at two levels in promoting economic growth. The first was the macroeconomic level or the general economic environment in which all firms operated. The second was at the microeconomic level or in specific policies aimed at particular segments within the economy.

The growth formula pursued by the Japanese government was based on several key assumptions. There were:

8/ Based on International Monetary Fund. International Financial Statistics, March 1986.

-- A domestic consensus that gave priority to industrial growth and exports over domestic consumption.

-- A willingness on the part of the United States to allow Japan to pursue its economic objectives while providing a nuclear (and conventional) shield and access to U.S. markets while tolerating Japan's remaining protection of its home markets.

-- Acceptance and tolerance by other nations of Japan's growing economic influence, export surpluses, and seemingly protectionist attitudes.

-- Acceptance and tolerance by other Asian nations of Japan's growing role in their economies, particularly in direct investments, economic and technological assistance, and export thrusts.

-- Access to supplies of raw materials and stability in prices of inputs into the Japanese industrial machine.

The question facing Japan now is whether these assumptions have changed, and, if so, what that implies for the country's future. We explore this question by first reviewing Japan's formula for growth.

1. Macroeconomic Policies

For macroeconomic policies, Japan relied essentially on Keynesianism tempered with considerable learning by doing. The tools used have been traditional fiscal policies interspersed with more ready intervention into markets, particularly financial and foreign exchange markets. Markets were stimulated by such mundane measures as public works spending and tax cuts, while the exchange rate was kept at 360 yen per dollar from 1949 to 1971 through vigorous controls over foreign transactions and direct intervention into exchange markets. The government also often allowed cartels to operate. 9/

The government's key role, however, has been to raise expectations in the private sector with respect to future growth and to tilt economic development toward the industrial sector and away from household consumption. The income-doubling plan announced at the beginning of the 1960s, for example, awoke businesses to the potential for growth in the domestic economy and the need to invest to keep up with competitors. The booming economy assured that errors in overbuilding capacity would quickly be overtaken by growth while errors in underbuilding capacity could be disastrous in terms of maintaining market share. Japanese companies quickly adopted

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9/ See: Yamamura, Kozo. Economic policy in Postwar Japan. Berkeley, University of California Press, 1967.

policies that were biased toward rapid growth -- even in times of recession.

Stringent controls on foreign exchange, prior to 1980, moreover, kept financial capital at home. Private savings generated by rapid growth in income, an inadequate social security system, and tax incentives were channeled into the industrial sector where they were invested domestically rather than abroad. Government financial institutions, such as the Post Office which took in savings and the Japan Development Bank which loaned them out, assisted in funnelling savings from the household and agricultural sectors to the business sector.

During the 1960s and 1970s, furthermore, interest rates for business loans were kept low while those for consumers were high. The prime rate of interest for businesses was kept at 7 to 9 percent, while interest on consumer loans guaranteed by salary alone ranged from 60 to more than 100 percent. Home mortgages were difficult to obtain and required large down payments. Most interest earned on savings deposits was exempt from income taxation (or taxes were evaded easily), while interest on consumer loans could not be deducted from taxable income.

Likewise, government spending on sewers, parks, and streets to improve the quality of life lagged behind expenditures for ports, railways, or electrical plants designed to make the country more competitive internationally.

Citizens, although often complaining of the lack of affordable housing, did little to oppose the government bias toward business. Few sought to change government policy as long as real standards of living were rising and they could gradually acquire consumer status symbols, such as the "three C's": a car, air conditioner, and color television set. (A "fourth C," personal computer, was added in the 1980s.) And most received considerable satisfaction just from reading of the competitiveness of Japanese products abroad and seeing the rising profile of Japan at events such as summit conferences where the Japanese Prime Minister could be photographed standing in the middle of the heads of state next to the American President instead of at the fringes beyond Canada and France.

Defense. Another element in the ability of the government to devote attention to economic growth has been Japan's position as a forward link in the U.S. strategic defense system. Being shaded by the U.S. nuclear shield while spending less than 1 percent of GNP on defense (compared with as much as 17 percent on the eve of Pearl Harbor) not only freed resources for commercial activities, but steered the best scientific minds away from military research and development and toward research on commercial products.

Although increased spending on defense now would likely result in higher (not lower) economic growth rates over the medium term, in the past the lower defense burden did allow the central government to reduce taxes and to devote more resources to industrial activities.

Currently, however, given Japan's surplus of capital combined with sluggish economic conditions, any future increase in government spending, whether for defense or for domestic programs, would likely stimulate the economy on the demand side while having few negative effects on corporate economic development (unless increased expenditures were all spent abroad for new equipment). The idea that growth rates would slacken if Japan were to shoulder more of its own defense burden is "simplistic at best and inaccurate at worst." 10/ Still it is apparent that the country did benefit greatly from its relatively low defense spending during the 1960s and into the 1970s when capital was relatively scarce.

2. Microeconomic Policies

Import Substituting Industrialization. The second level at which the government intervened to transform the economy was at the firm or business level. The strategy used by Japan can perhaps best be described as that of import-substituting/export-promoting industrialization. This is economic jargon for the process by which production by domestic industries is developed in order to substitute for purchases of imports. As production rises, exports are encouraged.

This process was first observed and characterized during the 1930s in Japan in terms of Western textiles, looms, and other machinery. The French Jacquard loom, for example, was first imported. As imports rose, domestic production -- encouraged by the government -- began to develop. Japanese altered the looms to fit a country where labor was cheaper and metal parts more expensive. Soon imports declined, and within just a few decades, Toyoda looms were being exported back to Europe.

The success of this development strategy depended on (1) having a domestic labor force and entrepreneurs who could build industries able to become competitive not only in domestic but foreign markets; (2) enlightened government decisionmakers who could not only decide which industries to foster but could tell when attempts to nurture a domestic industry were futile and could muster the political support to disband infant industry programs; (3) being internationally "invisible" in order to avoid pressures by trading partners to liberalize markets and accept imports; (4) having a citizenry willing to tolerate a lack of consumer goods or public amenities in order that resources could be devoted to industrial development; and (5) a system of education, public health, and social mores that produced workers who were highly motivated, disciplined, technologically literate, and mobile.

10/ Okimoto, Daniel I. The Economics of National Defense. In Japan's Economy, Coping with Change in the International Environment, ed. by Daniel I. Okimoto. Boulder, CO, Westview Press, 1982. p. 250-62.

The basic philosophy undergirding an import-substituting industrial strategy is that comparative advantage in almost any industry can be created. Even for resource-intensive industries, such as mining and minerals, a country might not be internationally competitive in primary production (because of lack of natural resources) but it can be so in the secondary stages of production. The vital ingredients to create competitive industries are to be found in human and financial resources, and not just in a country's natural endowment.

The basic objective of an import-substituting/export-promoting industrial strategy is for domestic production to move as far down the production process as possible in each product. In making copper wire, for example, even though Japan could not be competitive in copper mining, it could be competitive in smelting -- particularly after inventing the continuous smelting process -- and in the manufacture and marketing of copper wire. In most cases, the greatest value added was not in the original mining process anyway but in later stages of production.

For Japan, the import-substitution strategy has worked in many industries, although notable failures also exist. In industrial products such as computers, semiconductors, consumer electronics, machine tools, automobiles, and ships the strategy has worked well. It has worked less well in pharmaceuticals, fertilizers, and aluminum. Essentially, it has failed in beef raising, certain citrus production, and production of some alcoholic beverages. The jury is still out on satellites, aircraft, and biotechnology products.

As the Japanese economy has matured, the import-substitution/export-promoting strategy has been augmented by a policy to phase out declining industries. The shipbuilding, textile, fertilizer, and aluminum industries in Japan have reached their zenith and have required government assistance in reducing capacity and retraining workers. 11/

Strategic Method. As the country has developed, the strategic method has not been "to pick winners and losers" as much as it has been to keep the economy moving up the technological ladder. The ultimate goal has been to develop competitive industries across the economic spectrum, but the sequence in which industries were promoted required a focus on those industries that would form the basis for the next generation of Japanese exports. The industries selected centered on those with high world income elasticity (products whose sales would increase relatively fast as world income rose) and those

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11/ McGregor, Margaret A. and Katherine V. Schinasi. Positive Adjustment Policies Toward Declining Industries in Japan. In U.S. Congress. Joint Economic Committee. Japan's Economy and Trade with the United States. Joint Committee Print, 99th Cong., 1st Sess. Washington, U.S. Govt. Print. Off., 1986. p. 168-180.

which embodied sophisticated technology but which promised declining costs of production as output increased. 12/

During most of the high-growth period, the selection was simple because Japan was being pulled up the technological ladder by the need to catch up with world-class industries in the United States and Europe. The targets were clearly visible, and the goal was to narrow the gap between existing technology in Japan and the world's best. Now that many industries have caught up with world competition, however, the economy is being pushed, as well as being pulled, up the technological ladder.

A former vice-minister of MITI described the pushing forces in this process as follows. Japan is like a large, multi-storied building situated on a seashore. The lowest stories are inhabited by the most labor-intensive producers, such as textile and toy manufacturers. As one climbs up the building, the industries represent higher and higher levels of technology until one arrives at those at the top, such as aerospace, computer systems, and biotechnology. Ocean waves beating on the building represent competition from low-wage, developing countries. Gradually the waves erode away the lower floors. Unless businesses continue to move up to higher floors, their main products will be washed out to sea by LDC competition.

Japan remains highly vulnerable to competition from the newly industrializing countries of Asia because of its rising costs of production, geographical proximity and similarities in culture. While average hourly compensation for production workers in Japan reached $9 in 1986 (at an exchange rate of 170 yen per dollar), such compensation in Korea, Taiwan, and Hong Kong was still less than $2 per hour. 13/ Eventually large segments of labor-intensive production may have to move out of Japan to other Asian developing nations.

Targets. The strategy of the government in inducing movement up to higher levels of technology can be seen in the sequence of industries targeted for development. In the 1950s, Japan's most competitive exports were labor-intensive textiles and light manufactures. At that time, the industries targeted by the government for growth were steel, shipbuilding, chemical fertilizers, synthetic fibers, and some electronics and motor vehicles. By the 1960s, as these favored industries began to make their mark on world markets and increasingly became able to compete on their own, the list shifted toward new branches of engineering, passenger cars, electronics, and petrochemicals.

12/ Allen, George C. The Japanese Economy. New York, St. Martin's Press, 1981. p. 87-88.

13/ U.S. Bureau of Labor Statistics. Unpublished data.

By the 1970s, the list had moved toward higher technology industries, such as energy, computers, and microelectronics. And by the 1980s, biotechnology, new materials, and artificial intelligence had been added to the list. The targets in 1985 include fewer industries already existing elsewhere (such as aerospace) and more specific products at the frontiers of technology that other nations also are racing to develop.

Means. Japan's industrial policies have not required massive government projects similar to the Anglo-French Concorde supersonic transport or even a government-owned Volkswagen automobile company. In general, since the turn of the century, governmental support for industry has been more incremental and subtle than discrete and overt. Rather than launching high-profile projects with massive government subsidies, the modus operandi has been to induce firms to compete internationally through a variety of means.

That is not to say that in recent high technology projects government support has not been highly visible. In the development of products, such as very large-scale integrated circuits and numerically controlled machine tools, the government has provided subsidies, sponsored joint research and development efforts, and has sent signals to private capital markets that such endeavors should be viewed favorably. The Japanese strategy, however, has been to support and encourage companies to collaborate in the R&D phase, but to allow them to compete to the death to commercialize and sell the resultant products.

The more important government support, however, has occurred largely behind the scenes and has been embodied in a myriad of decisions on items such as import tariffs, quotas, foreign exchange licensing, joint ventures, product standards approvals, approvals for direct investments, and financing.

In each case, the underlying philosophy for government officials seemed to have been that domestic products were preferred over foreign and that if domestic products were not available, their development should be fostered. These attitudes carried over to the extent that even activities such as beef and peanut production (that could scarcely be competitive world wide) have been fostered. A recent case illustrates these attitudes. The government forced the Perrier company to manufacture its natural spring water in Japan by requiring that the water from France be sterilized by boiling before allowing it to pass through customs.

In addition to the obvious protection of "infant industries" that is also practiced in many other countries, the government has intervened in other aspects of the economy to favor of its home producers. For example, it might have required that an international joint venture include the transfer of technology to the Japanese partner. Even a wholly owned subsidiary (such as IBM Japan) often was allowed to operate only if it transferred some of its proprietary technology to domestic companies.

Another example was a Japanese chemical firm that was not allowed to import certain equipment with processing tanks that were considered to be too small to provide scale economies that would enable it to become internationally competitive. For many years, foreign exchange applications to import luxury consumer goods, such as automobiles, were routinely disapproved. As long as the government controlled foreign transactions, it held key levers by which it could intervene in private decisions in order to foster the long-term development of the domestic economy. 14/

Competition. This industrial policy did not imply, however, that Japanese infant industries could expect to continue to be nurtured in a protected environment forever. Eventually, industries had to face international competition. The 1985 Action Program, in fact, attempts to establish the philosophy of "freedom in principle, restrictions only as exceptions," 15/ meaning that in principle imports would be allowed with some restrictions on a case-by-case basis, instead of the existing policy that in principle imports would be restricted with some allowed on a case-by-case basis. Whether this principle will be implemented or not, however, remains an open question.

Even during the time industries were protected from external competition they faced formidable competition from other firms within Japan. In the early 1950s, for example, when black and white television sets were being developed, 35 different Japanese firms with an eye toward television production imported the technology from abroad. 16/ There now are 9 major Japanese automakers, 15 makers of videocassette recorders, and 11 mainframe computer makers (including 5 affiliates of American manufacturers) all battling for market share in a crowded domestic market. From early in the industrial policymaking process, planners could see that unless firms were forced to hone their production and marketing skills in competitive markets at home, they would be unlikely to succeed in such markets overseas.

Hence, even though industries might have developed behind protective walls, within those walls were competitive brawls. This meant that firms had to go beyond developing "hothouse industries," anemic from being overly protected and too dependent on the government. In fact, the bulk of the industrial and technological development within Japan has occurred within Japanese firms using primarily their own funds. The government played a supportive role, but the actual

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14/ For further information see: Johnson, Chalmers. MITI and the Japanese Miracle. Stanford, Stanford University Press, 1982. Wheeler, Jimmy W., et.al. Japanese Industrial Development Policies in the 1980's. New York, Hudson Institute, 1982.

15/ Japan Announces Action Program. Japan Report, vol. 31, July/Aug. 1985. p. 1.

16/ Moritani, Masanori. Japanese Technology. Tokyo, The Simul Press, Inc., 1982. p. 121.

performance of the companies can be attributed mostly to their own actions, not the government's. Aggressive growth strategies, a bias toward rapid technological change, stringent quality control, and ruthless exploitation of competitive advantage have provided the basic ingredients of success for Japan's corporations. 17/

On the other hand, government-owned and supported companies, such as the Japan National Railways or Japan Tobacco and Salt Monopoly, have not been particularly stellar performers. The National Railways, despite impressive performance in developing high-speed trains, has been a chronic money loser. And the tobacco monopoly apparently can compete with American and European cigarettes only behind a wall of protection and by bureaucratic maneuvering (such as registering the brand names of potential imported cigarettes under its own name).

Education. Even the country's educational establishment seems designed to support industrial exporters. Although the system has been criticized for its heavy reliance on conformity, rote memorization, and examinations, the competitive nature of the experience forces students to discipline themselves and work exceptionally hard. By the time a Japanese student finishes high school, he is expected to be literate, highly numerate, to have studied a foreign language, to be familiar with the basic sciences, and to have faced the rigors of cramming for what is termed the "examination hell."

In 1955, only about half of the country's eligible youth entered high school. By the late 1970s, this had risen to more than 90 percent, and virtually everyone who entered high school completed it. 18/ Nearly 40 percent of the graduates go on to college.

Currently, educational leaders are attempting to improve the system to allow more emphasis on creativity and innovation, but there is little doubt that the high levels of competition, strict discipline, teamwork, and learning the "basics" has produced legions of factory workers and blue-suited "salary men" who not only can implement techniques such as statistical quality control but who can be trained to represent companies well in international markets.

III. LESSONS FOR INDUSTRIALIZING COUNTRIES

Japan's experience with industrial policy both at a macro- and microeconomic level holds both promise and probable disappointment for currently industrializing countries.

17/ Abegglen, James C. and George Stalk, Jr. Kaisha, The Japanese Corporation. New York, Basic Books, 1985. p. 30-34.

18/ Vogel, Ezra F. Japan as Number One, Lessons for America. Cambridge, MA., Harvard University Press, 1979. p. 161.

As the first non-European country to scale the industrial ladder, Japan stands as a model for other Asian, African, and Latin American nations. It has demonstrated that such industrialization is possible even without abundant natural resources and with formidable barriers in terms of language, culture, and lack of space.

A. Favorable Conditions

Japan, however, enjoyed several advantages which current industrializing nations do not necessarily have. First was the long period over which the country accomplished its industrialization. Japan embarked on the path toward modernization more than a century ago. And reconstructing its economy after World War II was much simpler than the task confronting newly industrializing nations of creating industries never before existent domestically. The start from "square one" in Japan occurred in the late 1800s not too long after the industrial revolution in the West. In many LDCs today, "square one" occurred after the demise of colonialism following World War II.

Japan's second advantage was its near anonymity. Preoccupied by events in Korea, China, Europe, Southeast Asia and at home, Americans and Europeans largely looked the other way when Japan pursued protectionist import policies. Even after being accepted as members of the General Agreement on Tariffs and Trade and International Monetary Fund, other industrialized nations tolerated even the more egregious of Japan's protectionist policies (such as agricultural import quotas). The country was forced, however, to bring its system more into line with the requirements of these organizations by dropping direct subsidies for exports.

Many newly industrializing nations today do not have the luxury Japan had of being invisible. Because of Japan's economic record, countries such as South Korea and Taiwan are being referred to as the "new Japans," and their economic policies are being scrutinized to insure that they will not be able to pursue policies harmful to Western economic interests without complaints being lodged.

Japan's third advantage was that it was able to wrest proprietary technology from leading international firms who little suspected that the same technology would return in the form of competing products in years to come. World-class companies often jumped at the chance to license technology, particularly that which either was not at the cutting edge or so far out front that commercial applications did not yet exist. And even if some firms did refuse to license certain technology, a competing firm could usually be found that would do so. In the 1960s, Japan imported 7,295 foreign technologies, of which 57 percent or 4,144 came from

the United States, 19/ many of them for nominal amounts considering the cost of developing them domestically.

Now, however, leading firms are more wary of transferring technology without some return other than just current cash. Technology exchanges are becoming more mutual and long term, with consortia of multinationals sharing new developments and covering world markets jointly. 20/ Japanese companies with little technology of their own to offer, will find it more and more difficult to license advanced technology from world-leading firms. And leading firms are just as likely to establish subsidiaries to take advantage of new growing markets rather than transfer their technology to potential competitors.

The fourth advantage Japan enjoyed was that it embarked on its income-doubling plan during the 1960s at a time when world economies were embarked on the longest period of sustained economic growth in modern economic history. Recessions that did occur were often called "growth recessions," which indicated that the growth rate merely slowed down. The uninterrupted economic expansion combined with liberalizing world trade and a U.S. preoccupation with the war in Vietnam provided enormous opportunities for Japan's exporters.

Japan's fifth advantage was its low requirements for national defense. Unlike South Korea, Taiwan, China, and other industrializing nations, there has been no need for heavy military spending or conscription. The U.S. nuclear shield combined with the widespread perception that the most likely and persistent threat to national security would arise from international economic problems (such as an oil embargo, soybean shortage, or balance of payments crises) rather than a foreign invasion or nuclear war allowed the best resources to gravitate toward commercial, not military, activities.

B. Some Lessons for LDCs

Despite the unusually favorable conditions under which Japan developed its industrial strength, the Japanese experience still can be useful for current less developed countries. Many of the problems currently being faced by LDCs were also faced by Japan in the not too distant past. Shortages of foreign exchange, a scarcity of finance capital, technological backwardness, the difficulty of transferring resources from low productivity jobs in services and the agricultural

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19/ Ozawa, Terutomo. Japan's Technological Challenge to the West, 1950-1974: Motivation and Accomplishment. Cambridge, MA, The MIT Press, 1974. p. 25-7. Woronoff, Jon. Technology Transfer...Asian Style. The Oriental Economist, vol. 52, March 1984. p. 26-29.

20/ Ohmae, Kenichi. Triad Power, the Coming Shape of Global Competition. New York, The Free Press, 1985.

sector to higher productivity jobs in manufacturing, a paucity of businesses with expertise in international languages and culture--all were obstacles that Japan has overcome to one extent or another.

Current LDCs, moreover, can improve on the methods used by Japan. Japan, for example, relied primarily on the bureaucrats in the ministries of Finance and International Trade and Industry to balance foreign exchange accounts without devaluing their currency. Modern LDCs who do not necessarily have the lean and well-respected bureaucrats who can accomplish this task can place some of the responsibility on importing companies, particularly, foreign multinationals to do so. Despite protests from other countries, China and Mexico increasingly are resorting to performance requirements--requiring, for example, that foreign subsidiaries or joint ventures balance their foreign trade accounts. That is, for company imports to be balanced by exports, thereby bypassing the need for difficult day-to-day decisions by bureaucrats.

Capital. Japan's approach to generate finance capital both internally and externally was to rely on international borrowing only for emergencies and to provide incentives for domestic savers not to consume. These incentives included the tax free status of savings accounts (to a certain level), high rates of interest on loans for consumption, the practice of paying up to a third of a worker's wages as large, semiannual bonuses (which facilitated household saving), and an inadequate system for mortgages, pensions, and tuition subsidies (which encouraged private saving for these purposes). The resultant high personal savings were augmented by a banking system, backed by the Bank of Japan, that permitted the practice of "overloaning" in which banks loaned more than their reserves could justify. 21/

Technology. Japan overcame its technological backwardness by a combination of importing from abroad and fostering technological development domestically. Technology was imported through licensing, "reverse engineering," and a systematic scouring of the world for inventions and innovations.

Technology was developed domestically by first building on known products. Over most of the postwar period, Japan's contribution to modern technology has been mostly in incremental improvements to existing products and in process technology. Major technical contributions from Japan have been a relatively recent phenomenon. From 1953 to 1973, of 500 significant technological innovations, only 34 came from Japan. 22/

Examples of Japanese improvements to technology, however, abound. Sony, for instance, did not invent the tape recorder, but it

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21/ Adams, T.F.M. and Iwao Hoshii. A Financial History of the New Japan. Palo Alto, Kodansha International, 1972. p. 36, 65, 534.

22/ Moritani, M., Japanese Technology, p. 18-19.

miniaturized the unit and created a whole new market for portable, personal recorders. It also designed a production system that combined automation, inventory control, and quality assurance which gave it low production costs and high quality. Only after such experience with improving existing technology, did Sony succeed in projects such as commercializing the video cassette recorder and developing a compact disc player.

Agriculture. Japan's support of the growing industrial sector by the agricultural sector also is instructive. In the country's early industrialization, exports of silk and tea paid for imports of modern equipment and technology. Surplus savings from agriculture were transferred to industries often through landlords who had one foot in each sector. From early on, a rational system of government taxation based on agricultural production was able to finance government expenditures.

As the economy was being transformed, the agricultural sector provided the labor needed in the growing industrial sector. The country gained as people in low-productivity jobs were transferred to higher-productivity jobs in urban factories. As a result, the population gradually become urbanized. In 1960, 29 percent of Japan's jobs were in agriculture and forestry. By 1970, this percentage had fallen to 17 percent, and by 1980 to 10 percent. 23/

Despite the decline in the importance of agriculture in the total job spectrum in Japan, farming (along with small-scale retailing), still serves as the employer of last resort and hides a considerable amount of underemployment in Japanese society.

When the government has intervened in the urbanization process, it generally has done so to slow rather than to hasten the demise of the small farmer (as well as mom-and-pop retail store). Examples include current land tenure laws that inhibit absentee ownership, protection from food imports, high agricultural subsidies, as well as property taxes that encourage owners to keep land in agricultural production despite its extraordinary value in industrial or residential use (and restrictions on building supermarkets). These have slowed the consolidation of farms or elimination of the small, part-time farmers in suburban areas.

The Japanese logic here is that for certain industries, adjustment to international competition is too difficult to allow international markets to determine survival. Many of the persons employed in agriculture (and retailing) are the elderly or persons not well suited to assembly line work. Some inefficiency and low productivity, therefore, is allowed in exchange for having an employer of last resort and keeping the government unemployment rolls down. (The inefficient distribution system, moreover, tends to keep

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23/ Japan. Management and Coordination Agency. Japan Statistical Yearbook, 1984. Tokyo, Ministry of Finance Printing Bureau, 1984. p. 72-73.

out imported consumer goods.) A question, however, is how much longer the Japanese consumer will be willing to pay the price for such inefficiency.

Foreign Language Competency. The Japanese solved their problem of a lack of personnel competent in foreign language and culture by establishing trading companies that specialized in buying and selling both domestically and on foreign markets. These firms provided the international expertise to Japanese conglomerates. The government also established the Japan External Trade Organization (JETRO) and other institutions to provide overhead and other support for exporting companies. 24/ The Japanese education system, furthermore, required years of foreign language study, while individuals targeted to work in international divisions of companies often spent long periods of time abroad.

IV. PROSPECTS FOR THE YEAR 2000

Japanese speak of a twenty-year cycle in the fortunes of their country. There are twenty years of prosperity followed by twenty years of turmoil. The 1920s and 30s generally were prosperous but were followed by the war, occupation, and reconstruction of the 40s and 50s. The 60s and 70s were prosperous but many fear that the 80s and 90s will hold new and difficult challenges for the country.

A. A New Uncertain Age

Today Japan is at a major turning point in its economic history. Although currently riding the crest of a wave of success, and despite the optimistic forecast by its Economic Planning Agency in 1985 that the country was entering a new age of economic growth without inflation, the country has found that the conditions that have supported its rapid economic growth have now changed. 25/

Just as 1954 marked the end of the postwar reconstruction, and 1973 the beginning of supply limitations, the mid-1980s mark the entry into a new and more uncertain era that seems to require a complete rethinking of Japan's growth formula. Actually, the nation merely faces conditions that are similar to those already confronted by other advanced nations. They are caused by protectionism abroad, the internationalization of the economy, and the diminished ability of government to direct economic activities.

24/ U.S. Library of Congress. Congressional Research Service. JETRO: The Japan External Trade Organization. Report No. 85-1112 E, by R. Kevin Flaherty. Washington, 1985.

25/ Nanto, Dick K. Japan's Economy. Current History, vol. 84, December 1985. p. 415-16.

Protectionism. The first and most important characteristic of this new age is the rising swell of protectionism aimed at Japan's exports. In the past, the country could exploit market niches, or as the Japanese say, "glean rice from the fields." Exports could slip into markets -- usually at the low end -- without drawing much notice. Admittedly, disputes over Japan's exports of textiles, steel, and television receivers flared up periodically, but these conflicts could be managed by stretching out negotiations and establishing a relatively large Japanese market share either through quotas or voluntary restraints. 26/

Japan's exports now have grown so large, however, that even in massive markets like the American or European, they stand out and are accused of causing disruptions. A wide spectrum of established industries in the world has been or is currently being threatened by competition from Japan, and a loose coalition of interests is willing to support measures to prevent further Japanese incursions into markets.

Europe is a case in point. A burgeoning trade deficit with Japan along with rising market shares for Japanese cars and other products is stirring protectionist sentiments not unlike those already alive in the United States and Asia. While Japan heretofore has been able to circumvent major difficulties by stopgap measures, such as voluntary export restraints, establishing assembly plants in European countries, and playing one country off against another (particulary in bidding for the location of Japanese assembly plants), both the European Community and individual member nations are taking a serious look at what they term to be the "Japan problem." If the hard-liners prevail, Japan may find that increased exports to Europe will be very difficult without a similar increase in imports from Europe into its own market. 27/

Internationalism. The second major characteristic of the new age is the growing internationalization of Japan's domestic economy and the resultant economic interdependence. Given the country's large role in international trade, plus the rapid reduction in official import barriers in its product and capital markets, economic activities in Japan are being influenced more and more by activities abroad. Japan can no longer adopt macro- or microeconomic policies without considering their impact on other countries. The economic policies of other countries, moreover, particularly those of the United States, not only affect Japan but place a constraint on domestic policies.

26/ Destler, I.M. and Hideo Sato. Coping with U.S.-Japanese Economic Conflicts. Lexington, MA, Lexington Books, 1982.

27/ Information from interviews by the author with government officials and members of parliaments of the European Community and France, Germany, and the United Kingdom during May and June, 1986.

Japan, for example, is no longer immune to the effects of world business cycles. A recession in other major industrialized countries is likely to drag the Japanese economy down also. The internationalization of the yen, moreover, is forcing Japan's financial markets to respond to world markets and is diminishing the ability of monetary authorities to control interest rates. The decontrol of financial markets is rapidly turning Tokyo into an international financial center similar to those in London and New York. 28/ And Japan's legislative process is increasingly being monitored by other nations to insure that policies are not adopted that would be unfavorable to outside interests.

Japanese corporations, moreover, increasingly are being forced to adopt practices similar to those in other nations. The foundation of Japanese management includes permanent employment, seniority-based promotions, a wholistic concern for the employee, early retirement, male-based management, and other paternalistic practices. These are being challenged by pressures generated by the slower rate of growth, financial realities, and the more international staff of companies that are rapidly becoming multinational.

Role of Government. The third characteristic of the new age is the diminished role of government and its influence over the private sector. The popular interpretation of Japan's economic development has been that much of its success can be attributed to the skillful work of Japan, Inc., the triad of business leaders, bureaucrats, and politicians who guided the economy to world-class status.

There is no doubt that the government worked hand in hand with business in fostering modern economic development in Japan. Historically, the ministries attracted Japan's brightest new college graduates; and the central government had the authority to set the national economic agenda, to intervene in private economic decisions (through administrative guidance), and to veto undesirable dealings with foreigners.

During most of the postwar period, moreover, a national consensus prevailed that the top priority was to catch up with the advanced industrial countries of the world. Domestic industries were to be strengthened to compete internationally. Domestic infant industries were favored, even if Japanese consumers had to put up with high prices and low quality during the initial years. Social infrastructure took second priority to industrial development.

By the mid-1980s, however, the power of the ministries had eroded. Given the decontrol of foreign exchange and capital transactions, with businesses no longer dependent on the government for loans or loan guarantees, with no consensus on national priorities, and with private firms obtaining access to their own

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28/ Sakakibara, Eisuke and Akira Kondoh. Study on the Internationalization of Tokyo's Money Markets. JCIF Policy Study Series, No. 1. Tokyo, Japan Center for International Finance, 1984.

foreign information and technology, the power of government to intervene has diminished.

The Japanese bureaucracy is still relatively paternalistic with respect to industries under its jurisdiction, but much less so than in decades past. With less intervention, the Ministry of International Trade and Industry is rapidly assuming a role more like a think tank that can analyze trends and give advice on strategy rather than controlling the day-to-day activities of businesses under its jurisdiction. 29/ Japanese industrial policy now tends to focus on the two ends of the product cycle -- at the launch and at the decline of an industry -- the times in any life cycle when outside help is the most necessary.

The government's budget deficit, moreover, has become a major constraint on policy. Given a 1985 deficit of $49 billion or 22 percent of expenditures, along with projections of rapidly escalating outlays for interest on past bond issues, government policy is increasingly shifting toward allocating scarce funds rather than dividing up rapidly expanding revenue windfalls (as was the case in decades past). The only two budget categories that have been growing consistently are defense and foreign aid, primarily because of external pressures. New programs to fund research and development, build new infrastructure, or provide subsidies to industries face increasing competition from other budgetary categories. The reduced flexibility in the budget has diminished the ability of bureaucrats to control businesses by influencing budget decisions.

Aging. Japan's future, moreover, is clouded somewhat by the rapid aging of its population and the consequent effect of this change on rates of saving and government expenditures. By the year 2000, the percentage of Japanese over 65 years old is expected to rise from the current 10 percent to around 16 percent, the same level as that of Sweden in 1980. 30/

When tax revenues were rising rapidly during the years of high inflation in 1972 and 1973, Japan's aged were given virtually free medical care along with a hefty increase in social security pensions. As society ages, these expenditures will become a larger and larger burden on the central government's budget. Savings rates, moreover, are likely to fall, as relatively fewer people will be in the economically active population and the elderly use their accumulated savings for consumption.

The aging of society also affects productivity and the costs of manufacturing. Japanese plants have been able to keep costs down by expanding rapidly and hiring young (and cheap) workers. As growth

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29/ Interviews by the author with MITI officials and business executives in Japan during 1983 and 1985.

30/ Japan Economic Planning Agency. Japan in the Year 2000. Tokyo, Japan Times, 1983. p. 117-147.

slows and the labor force grows older, however, the average age of a worker will increase, and wage (and retirement) costs will rise.

Despite the aging problem, however, the population is expected to continue to save and invest at rates sufficiently high to maintain growth rates. Even if current personal savings rates (17 percent of disposable income) and investment rates (28 percent of GNP) decline, they would still be relatively high for an advanced industrial country.

B. Maekawa Report

In April 1986, a blue ribbon advisory group appointed by Prime Minister Nakasone reported that "the time had come for Japan to work a historical transformation of its traditional economic policies and pattern of life." It recommended that the government set a medium-term national policy goal of steadily reducing the nation's trade imbalance to the extent harmonious with the world economy. It also recommended that Japan turn from excessive dependence on exports to expanding domestic demand and improving the quality of life of the people.

Specific recommendations in the report included promoting housing policies and urban redevelopment, reducing working hours, promoting social infrastructure, encouraging adjustments from declining to rising sectors, promoting direct investments both overseas and at home, encouraging imports of manufactured goods, liberalizing financial and capital markets, and promoting increased economic assistance to developing nations. 31/

The advisory group concluded that the country must recognize that continued large trade imbalances create a critical situation not only for the management of the domestic economy but also for the world. Without changes in policies, there could be little further development for Japan.

The recommendations of the report are consistent with the new era of uncertainty for Japan. The nation no longer can exert the type of control over domestic markets once taken for granted. The swell of protectionism aimed at it from abroad, moreover, is receiving the highest consideration among the country's policymakers.

The time has come, furthermore, when citizens are seeking to enjoy more of the fruits of their labor. Young aspiring managers are asking why they should work so hard to acquire status symbols of consumption without the time or space to enjoy them. And even though most Japanese were offended at the characterization of their housing

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31/ The Report of the Advisory Group on Economic Structural Adjustment for International Harmony. Submitted to the Prime Minister, Mr. Yasuhiro Nakasone on April 7, 1986. (Provisional translation). Tokyo. Photostatic copy.

as "rabbit hutches," such foreign criticism of their lifestyle has caused them to consider whether or not their single-minded pursuit of world market share for their manufactured products has caused an imbalance in the development of their society. And business leaders, who once thought Western criticism of their export success was simply a form of sour grapes, now realize that bilateral trade surpluses with the United States, Europe, and countries of Asia, while in theory perhaps not economic problems, certainly had become political ones. 32/ Hence, the need for the Maekawa study.

The question, of course, is whether or not the government can reign in its aggressive exporters and shift their focus of economic activity from foreign to domestic markets. And even if the government should succeed in doing so, a question remains as to whether or not such action would make any appreciable difference.

Given that the locus of business strategy and activity has now passed from government to private hands, the ability of the government to change the behavior of businesses seems limited. In particular, since the export successes of Japanese firms were not provided by the government in the first place, it would be extremely difficult to take those successes away. The government should be able to make some incremental changes in policy -- shifting more subsidies into consumer goods, such as housing — but it can hardly ask its businesses to become less competitive in world markets.

Japanese exporters, moreover, often see other Japanese companies as their major competitors in overseas markets and not the foreign producers. For many products, the perception is that if one can win a market share against other Japanese competitors, the non-Japanese competition will be taken care of in the process. In the U.S. and European motorcycle markets, for example, it appears that Honda was less concerned about competition from Harley Davidson or Triumph than it was from Kawasaki and Suzuki. In the rough and tumble battle for market share among the Japanese producers, Harley Davidson and Triumph were nearly wiped out.

Another problem is that the growing popularity of voluntary restraints as a solution to trade friction has created a rush among Japanese exporters to establish market share in foreign markets early in the product cycle. If not, if export restraints are imposed and the export market divided according to historical market shares (as is the usual practice), the latecomers will be penalized. Witness the predicament of Isuzu, Suzuki, Mitsubishi, and Subaru who were stuck with small allocations of cars bound for the lucrative American market because they were selling fewer cars than Toyota or Nissan when the voluntary restraints were announced.

32/ U.S. Library of Congress. Congressional Research Service. Japan-United States Economic Relations: Views of Japan's Economic Decisionmakers. Report No. 86-52 E, by Dick K. Nanto. Washington, 1986. p. 33-34.

Hence, when one company finds a potential export market, others quickly follow. The result is a surging market share for all Japanese producers and what appears to the host country as a laser-beam incision into domestic markets. For the Japanese government, however, other than trying to persuade exporters to be prudent or, in the extreme case, to impose voluntary export restraints or price floors, there is little it can do to control such competitive behavior. Such ruthless exploitation of competitive advantage has become ingrained in Japanese business strategies and is unlikely to disappear in the near future.

For the Japanese government, therefore, changing the orientation of Japanese exporters from foreign to domestic markets appears futile. Actually, Japanese exporters already are competing heavily in domestic markets. In fact some companies, such as Honda, have sought refuge in foreign markets to escape some of the cutthroat competition at home.

Quality of life. What the government can do, and what seems to be implied in the Maekawa recommendations, however, is to change its policies from being driven by the import-substitution/export promotion formula to one that places a high priority on the quality of life. Such a perspective for government policy would favor high domestic growth; less government intervention; more funds for housing, sewers, parks, and other social infrastructure; liberalized imports; and greater economic freedom for all in society.

While this might not result in less trade friction abroad, at least the country could not be accused of basing its exports on sweatshop labor living in rabbit warrens surrounded by a society totally regimented toward building a better semiconductor.

And if these changes are not made, the foreign exchange market probably will, over time, restore equilibrium to the trading system anyway. In this case, hard-won productivity gains would be offset by an appreciating yen. In the meantime, the image of Japan could continue to erode, and the country could find itself increasingly isolated in world opinion.

The importance of the Maekawa Report is not that it lays out a comprehensive blue print for change, but rather that it marks a turning point in Japan's postwar economic policymaking. For the first time, a government commission has concluded that the import-substituting/export-promoting industrial strategy has reached its limits and that the time has come to shift to a new, domestically oriented policy. As this policy is pursued, more studies will be commissioned and concrete actions will be recommended, but the turning point in the process will likely be seen as the Maekawa Report.

C. Economic Outlook

Despite the difficulties facing Japan, it still should perform as well as or better than other industrialized nations over the next fifteen years. Barring a major economic, political, or natural disaster, economic growth should average about 3 percent per year in real terms. 33/ This would be at the moderately high end of the spectrum for advanced industrial nations and about the same rate at which the country was growing during the last two decades of the nineteenth century. At this rate, the economy should double in about 24 years (rather than the 7 years it took to double during the 1960s).

Given this growth rate, Japan is unlikely to overtake the United States in terms of the absolute size of its GNP in the near future, although if the yen should appreciate to 100 yen per dollar (from 155 in mid-1986), the dollar value of Japan's GNP at around $3 trillion would approach that of the United States. Japanese per capita income (and wages) then would be nearly twice that of the American.

Japan's surplus on merchandise trade is likely to peak over the next year or so and decline after that. Much will depend on whether the country will continue to provide capital to the world and on the behavior of commodity prices (particularly oil). If Japanese investors do not continue to ship money abroad or begin to call in their capital and sell their overseas portfolio investments, the yen may appreciate so much that the trade surplus could diminish considerably. Japan could find itself in the same situation as Germany--a country making products of quality but whose prices are high because of a strong currency. Currency appreciation could make Japan a high-cost producer in the world. And the current windfall in the form of lower prices for petroleum and food could reverse itself in the future and increase the country's import requirements.

Regardless of what happens in currency and commodity markets, Japanese companies will continue to be a major force in international trade. Even with a stronger yen, overseas investments and subsidiaries in low-wage countries along with advancements in robotics and flexible manufacturing should allow them to continue to offer competitive products in world markets. In fact, much of any decline in Japan's trade surplus could come from increased overseas production by Japanese companies, themselves.

Japan's overseas direct investments have been motivated by the need to secure stable supplies of raw materials and, more recently, to circumvent protectionist trade barriers. By the late 1980s, for example, Japanese automobile companies are expected to be producing more than one million vehicles per year in the American market. In 1986, as the yen has risen, corporations have been looking toward

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33/ This is not an econometric forecast but a bench-mark estimate put forth to generate discussion.

investing in other nations in order to contain costs of production. In most cases, these investments have been welcomed, although some have been characterized as "Trojan horses" or mere "screwdriver operations" that bring little value to the local economy. Still, given the excess of capital in Japan, the country is likely to remain a major supplier of investment funds and a creditor nation over the next 15 years.

Japanese industry has been hobbled by a government ban on exports of military products. Even dual-use technology is scrutinized carefully. Without the prospect of exporting, little incentive exists for businesses to develop products needed to become competitive in international military markets. As Japan's defense budget rises and growth in other exports slows, however, the government could reconsider its export ban. If so, a vast market could be opened to Japanese producers.

Japanese exporting industries, moreover, currently are riding the crest of a wave of prosperity in which their products are in strong demand the world over and their product pipelines are full. They have established themselves in overseas markets, and during the profitable years of the early 1980s, while the yen was undervalued, improved their balance sheets. Research and development programs are well funded, and products using new technologies are already in the commercialization phase. Many markets, moreover, are far from being saturated with Japanese products.

American businesses, therefore, will continue to confront considerable competition in mass-produced products from Japan (as well as from other Asian Pacific nations). And unless they look beyond the lucrative U.S. market and maintain an Asian strategy, they could find themselves being thrashed about in the jaws of competition and their market shares being eaten away.

This Asian strategy would include: (1) maintaining a presence in Asian markets; (2) monitoring technology and product developments in Asia; (3) continual efforts to lead in product development and to reduce production costs to remain competitive with Asian producers; (4) greater emphasis on maintaining market share and on exporting, particularly to Japan, rather than on generating short-term profits or raising stock prices, and (5) more attention to pricing strategy, product design, packaging, and quality assurance.

Without such an Asian strategy, American businesses competing with Japan and other countries of Asia could find themselves fighting a losing battle in which their only hope for survival would be to circle the wagons and petition the government for protection.

Japanese businesses, however, are not invincible. They too make mistakes and are subject to product cycles. As they confront many of the same problems of other multinational corporations, they are likely to settle into market patterns similar to those of other nations. As strong as Japan's exporting companies are, they are not so dominant that foreign firms cannot compete with them. A fundamen-

tal premise of economics is that a nation may have a comparative advantage in many industries, but it cannot dominate them all. And the future points more toward consortia of firms in the major markets jointly developing and marketing products rather than just for firms from one country to be competing against firms from another. 34/

At home, moreover, Japanese businesses are having to alter traditional management practices, such as permanent employment and seniority promotions, as growth in the economy has slowed and new capacity is being built overseas. The unemployment rate is nearing 3 percent and rising, despite the slow growth in population and lack of inward immigration. Japan, therefore, faces problems not unlike those in other nations.

For U.S. government policy, the growing economic strength and integration of the Japanese economy into world markets implies that economic policy deliberations need to include consideration of the Japan effect (or international effect). For example, a decision, such as the one to break up the AT&T telephone monopoly, might have been better had it given more consideration to the effect on imports of telecommunications equipment from Japan and the ability of American telephone companies to compete in world markets. The international effects of monetary or fiscal policies, education policy, science policy, and even domestic transportation policy should also receive due consideration.

In world politics, Japan's standing should continue to rise as it attempts to gain influence commensurate with its economic power. The era when the United States, for example, could begin the process of rapprochement with China without consulting Japan has gone. Japan is likely to take an increasingly independent stance on foreign policy issues, although it probably will continue to look to the United States for guidance, since international political leadership has not been in the Japanese tradition.

In international relations, Japan's dependence on imports of raw materials and food and on export markets has forced the country to walk a thin line that separates politics and economics in order not to offend trading partners. The country even has been reluctant to intervene in disputes in its own region, such as that between the two Koreas or between China and Taiwan, and has not been particularly aggressive in pursuing the return of some northern islands from the Soviet Union.

Still the new generation of Japanese leaders and bureaucrats is likely to chart a more independent course in world affairs. This generation appears to feel less indebted to the United States for postwar assistance, less influenced by traditional industries (such as steel that, in turn, feel indebted to U.S. industry), and less willing to follow political signals from the United States without first considering its own interests.

34/ Ohmae, K., Triad Power.

The most likely external political thrust for Japan would be to seek closer ties with its Asian neighbors in order to create a Pacific market comparable in size to the European or North American -- particularly as the European Economic Community becomes more unified and the United States and Canada continue talks on establishing a free trade area. 35/ Its growing foreign aid budget should give it more influence with developing nations in the region. (Japan, however, appears to have more to gain from being included in a U.S.-Canadian free trade area.) It also will have to devote considerable energy toward resolving disputes over its export behavior — particularly with the United States and Europe.

In summary, the heyday of Japan's high postwar economic growth has ended. It now faces the task of reorienting itself toward becoming a full contributing member of the world community of nations.

dkn/ebd

35/ Tokuyama, Jiro. "Pacific Economic Community" Concept. The Oriental Economist, vol. 48, July 1980. p. 10-13.

CHAPTER 3

EXPORT-LED DEVELOPMENT: THE EAST ASIAN NICs *

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* Prepared by William H. Cooper, Analyst in International Trade and Finance, Economics Division, Congressional Research Service.

I. INTRODUCTION

In discussions of Third World economic development, four countries stand out as "major success stories"-- Hong Kong, Singapore, South Korea, and Taiwan -- the East Asian newly industrializing countries (NICs). Sometimes called the "gang of four," "the four dragons" or the "new Japans," these countries also stand out as increasingly important participants in the international economic system, particularly as the United States, Japan, and Western Europe are concerned. Some analysts have also cited the four East Asian NICs as models for other developing countries to emulate.

This paper reviews and compares the economic development policies and experiences of the four East Asian NICs from 1960 to the present, specifically the role of exports. The paper examines the U.S. role and its policy implications. It concludes with an analysis of the factors that will help determine the economic prospects of the East Asian NICs for the remainder of the 1980s.

The study shows, among other things, that the East Asian NICs have based their economic successes on exporting during the past two decades. The United States has been the most important export market for the NICs, and therefore, a significant factor in their economic growth and development. Economic conditions in the United States and other industrialized countries, access to U.S. export markets, world energy prices, and the political environment within and around the four East Asian NICs will go a long way in determining how well they do for the remainder of the 1980s.

II. BACKGROUND

The four East Asian NICs are among the most successful economies in the developing world. With 1984 per capita Gross National Product (GNP) of $2,000 for South Korea, $3,000 for Taiwan, $6,300 for Hong Kong, and $7,200 for Singapore, they are richer than most developing countries and, in some cases, are closely approaching industrialized countries. 1/ Over the last two decades, the NIC economies have grown more rapidly than most developing countries and more rapidly than the industrialized countries. From 1965-83, for example, Hong Kong's per capita GNP increased an average 6.2 percent per year; South Korea's -- 6.7 percent; Singapore's -- 7.8 percent; and Taiwan's -- 8.1. During the same period per capita GNP for the

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1/ Data for Hong Kong, Korea, and Singapore are from the World Bank. 1986 World Development Report. Washington. 1986. p. 180. Taiwan data are from U.S. Department of Commerce. International Trade Administration. Foreign Economic Trends. Taiwan. November 1984. p. 2.

United States, Japan, the Federal Republic of Germany, the United Kingdom, and France together averaged 2.8 percent per year. 2/

The four NICs are making themselves felt in the United States and the rest of the industrialized world as major trade partners and international competitors. Together they bought 8 percent of U.S. exports and supplied 12 percent of U.S. imports in 1985. 3/ Growing shares of these imports are in manufactured goods, such as textiles, steel, and even cars, which compete head-on with U.S. production.

Observers often attribute the economic success of the East Asian NICs to government strategies which have promoted exports as the "engine of growth" for the rest of the economy. An export-led growth strategy encourages industries in which the country has a comparative advantage to produce and compete in the world market. The government maintains exchange rates that reflect the international value of exports and permit exporters to obtain imported raw materials at competitive prices. Sometimes the government offers subsidies, tax benefits, and other incentives to encourage exporting.

Many developing countries have followed an import-substitution strategy. Under import substitution, the government protects domestic producers from foreign competition through complex foreign exchange regulations, import restrictions, high tariffs, and other controls. Under this protection, domestic producers develop the capabilities to supply the domestic market with products that had been imported. Often import-substitution policies are accompanied by overvalued exchange rates, export taxes, and other disincentives to exporting.

A number of economic reasons underlie the apparent superiority of export-led growth over import substitution. 4/ Import substitution requires domestic producers to rely on domestic markets. Yet, in most developing countries, domestic markets are too small to sustain production at economically efficient levels. Under an export-promotion regime, domestic producers can expand production beyond local markets.

In addition, export-led growth allows an economy to concentrate on producing those goods and services in which it has a comparative advantage while importing the others. Developing countries generally

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2/ The World Bank. World Development Report 1985. p. 174-175.

3/ U.S. Commerce Department data. TradeNet computerized data retrieval system.

4/ The following reasons are cited by Anne O. Krueger in The Experience and Lessons of Asia's Super Exporters. In Export-Oriented Development Strategies: The Success of Five Newly-Industrializing Countries. Vittorio Corbo, Anne O. Krueger, and Fernando Ossa eds. Westview Special Studies in Social, Political and Economic Development. Boulder, Colorado, Westview Press, 1985. p. 197-200.

are abundant in unskilled and semi-skilled labor and, therefore, possess a comparative advantage in textiles, footwear, and other labor-intensive industries. Import-substitution based economies try to develop a range of industries, which may lead to a misallocation of resources.

Analysts also cite a "survival of the fittest" argument. Under an export-promotion growth strategy, domestic companies face competition from foreign companies which weeds out the least efficient producers. Import-substitution protects inefficient producers.

Export-led growth has disadvantages. Economies are more vulnerable to the vagaries of the international economy. Governments often grant subsidies and other benefits to exporters which lead to misallocation of resources.

III. ECONOMIC DEVELOPMENT IN THE NICs

A. South Korea

Prior to the 1960s, South Korea exhibited many qualities typical of a developing country: low per capita income, high inflation, an economy based on primary commodities, severe balance of trade deficits, and a heavy reliance on economic aid, particularly from the United States. 5/ Many of these problems resulted from the dislocations caused by Japan's occupation and withdrawal from Korea after World War II and from the Korean War. Korea also lacked natural resources but possessed an abundant supply of labor.

In the wake of the Korean War in the mid-1950s, the Seoul government instituted an import-substitution development strategy to break the country's dependence on primary commodities and to develop labor-intensive light industries. Korea managed some economic growth and development, but by the end of the 1950s and the beginning of the 1960s, Korea's economic growth was declining. Furthermore, the United States was reducing economic aid, forcing Korea to find alternative sources of foreign exchange. 6/

The Korean government under President Park laid the foundation for South Korea's export-oriented industrialization drive in the early 1960s. Many elements of this campaign remain in effect.

The key element of the strategy has been a series of incentives to make producing for export more attractive than producing for the domestic market: exemptions from customs duties on imported raw materials for exporters, reductions on tax liabilities on business income derived from exporting, and waiver of import restrictions for

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5/ Ibid., p. 191.

6/ Kim, Kwang-Suk. Lessons from South Korea's Experience with Industrialization. In Export-Oriented Development Strategies. The Success of Five Newly-Industrializing Countries. p. 59.

exporters. The government also has granted import privileges to exporters who achieve or exceed export-revenue thresholds. To underscore its commitment to export promotion, the Korean Government established, in the mid-1960s, the Korea Trade Promotion Corporation (KOTRA), to help market Korean-made products overseas. 7/

The Korean government changed its other economic policies to conform with its export-promotion growth strategy. Beginning in 1961, it implemented a series of won devaluations to improve the price competitiveness of Korean exports. It also discarded the multiple-exchange rate system, a legacy of the import-substitution strategy, and established a unified exchange rate. This change was designed to reduce the confusion a multiple-exchange rate system generates, which itself impedes exporting. 8/ With some exceptions, the Korean government has tried to maintain realistic exchange rates since this period. The government has also given preferential treatment to exporters in rationing credits. 9/

Since the early 1960s, the Korean Government has been liberalizing its import policies to permit exporters to obtain imported inputs at competitive prices. For example, in 1967, it shifted from a positive-list system for imports (that is, a list which indicates only those products which can be imported) to a negative (list of products which cannot be imported). Some observers view this change as a step towards liberalizing import policy. 10/ Korea does not follow a free-trade policy, however. It still protects domestic industries from foreign competition. The government restricts imports of computers, construction equipment, sporting goods, and agricultural equipment through import licensing and high tariffs.

Since the 1960s the Korean government has taken steps to attract foreign investment. In 1960 it passed the Foreign Capital Inducement Law to establish foreign participation in specific investment projects. The government later loosened restrictions on foreign investment, such as minimum requirements for Korean equity participation, and established foreign investment incentives, including tax holidays for foreign investors. 11/ But Korea restricts foreign participation in certain sectors, such as tobacco and insurance to protect domestic "infant" industries from foreign competition.

7/ Krueger. The Developmental Role of the Foreign Sector and Aid. p. 95-96.

8/ Ibid., p. 86-89. See also Kwack, Sung Yeung. Economic Development in South Korea. In Models of Development: A Comparative Study of Economic Growth in South Korea and Taiwan. Lawrence J. Lau (ed.) Institute for Contemporary Studies. San Francisco, ICS Press, 1986. p. 90-92.

9/ Ibid., p. 98.

10/ Ibid., p. 127.

11/ Ibid., p. 143.

TABLE 1. Major Economic Indicators -- Korea
(Average annual growth rates)

	1961-65	66-70	71-75	76-80	81	82	83	84	85
Real GDP	6.5	12.7	9.0	7.6	6.9	5.5	9.5	7.9	4.7
Real Exports	N/A	33.1	33.6	15.9	17.5	6.5	16.3	15.6	7.6
Real Imports	N/A	35.0	11.4	15.6	11.1	0.3	13.3	15.6	6.1

Source: CRS calculations based on data from the International Monetary Fund. International Financial Statistics. TradeNet Computerized data retrieval system.

Since the early 1960s, the Korean economy has achieved substantial growth, and exports have been a major factor. The role of exports in total production has increased. In 1962, exports accounted for 5.1 percent of total Korean Gross Domestic Product (GDP) and 37.5 percent in 1984. 12/ The data in table 1 indicate that overall Korean economic growth (as measured by real GDP) picked up in the latter half of the 1960s and into the first half of the 1970s with average annual growth rates of 12.7 percent and 9.0 percent for the two periods. Furthermore, real exports grew very rapidly, an average rate of over 30 percent per year for both periods. Real exports grew much more rapidly than total real GDP, suggesting that the export sector had become an "engine of growth" for the Korean economy.

During the 1976-80 period, real exports grew at less than half the rate of the previous five-year period. Between 1979 and 1980, real GDP declined 3 percent, the first downturn since the 1960s, and real exports stagnated in 1979 before picking up in 1980. 13/ Observers have attributed this decline to a number of factors. Korea was hit hard by the explosion in world oil prices in 1978. While Korea managed to minimize the effects of the first oil crisis in 1973-74, the second crisis proved to be too great. The crisis also led to a general economic slowdown, especially in the United States and Japan, its major export markets. Furthermore, Korea was facing growing protectionist attitudes in the West against labor-intensive

12/ CRS calculations based on data in International Monetary Fund. International Financial Statistics. Yearbook. 1981. p. 268-269.

13/ CRS calculations based on International Financial Statistics. Yearbook 1981. p. 268-271.

products. President Park's assassination in 1979 also contributed to the economic instability. 14/

In the late 1970s, the Korean Government shifted its economic strategy towards promoting the development of capital-intensive industries, such as steel, shipping, machines and chemicals. Increasing Korean wage rates were reducing the country's comparative advantage in labor-intensive exports. In addition, the United States was reducing its military presence in Korea, and the government felt the need to develop its own defense industries to decrease its dependence on the United States. The government used a series of incentives, such as credit allocations, to promote capital-intensive industries. This policy led to an allocation of resources away from the labor-intensive industries to the capital-intensive industries, which contributed to the overall downturn in Korean economic activity during the late 1970s and early 1980s. 15/

As table 1 indicates, real GDP increased in 1981 and through 1985, but at rates below those achieved in the late 1960s and early 1970s. Exports still remain a major factor in Korean economic growth as real exports have grown much more rapidly than the rest of the economy.

TABLE 2. Commodity Structure of Korean Exports
(Percentages of total exports)

	1965	1975	1980	1984
Total	100.0	100.0	100.0	100.0
Non-Manufactures	39.0	18.5	9.8	8.3
Manufactures	60.9	81.4	90.2	91.7
Chemicals	0.2	1.4	4.5	3.1
Basic Manufactures	37.9	29.1	35.7	25.2
Machines and Transportation Equipment	3.1	13.8	19.7	35.3
Misc. Manufactures	19.7	37.1	30.3	28.1

Source: CRS calculations based on United Nations trade data obtained from the TradeNet computerized data retrieval system.

The role of manufactured products in Korean exports has grown substantially over the years. In 1965 about 61 percent of Korean

14/ See for example, Kim, Kwang Suk. Lessons from South Korea's Experience with Industrialization, p. 70-73.

15/ Ibid.

exports were manufactured goods, but about 92 percent were in 1984. More significant has been the shift in commodity specialization within the manufactured goods sector. In 1965, most of the manufactured goods exports were in the labor-intensive categories of basic manufactures (leather goods, wood products, textiles) and miscellaneous manufactures (travel goods, wearing apparel, footwear). The more capital-intensive sector, machinery and transportation equipment accounted for about 3 percent of total Korean exports in 1965. By 1984, the total shares of labor-intensive goods (basic and miscellaneous manufactures) remained about the same, that of the capital-intensive sector had increased to 35 percent, evidence that South Korea has been industrializing. Non-manufactured exports consist mostly of food products.

B. Taiwan

The background against which Taiwan launched its export-led development offensive was similar to that of Korea. Taiwan faced the post-war era with the legacy of 50 years of Japanese rule. This legacy left some benefits, including an established infrastructure (water supply system, transportation, and agricultural development).16/ But intensive allied bombing, Japan's World War II defeat, and its forced withdrawal from Taiwan drained the economy.

Taiwan was critically affected by the Communist takeover of the mainland in 1949 and the Nationalist government's subsequent assumption of power on Taiwan. These events sent the Taiwan economy into a tailspin. Among other things, Taiwan lost its two most important export markets, Japan and mainland China, leading to large trade deficits. The economy faced hyperinflation that got underway at the end of the Japanese occupation and peaked at an annual rate of 4600 percent in May 1949. 17/

In the early 1950s, the Nationalist Government imposed an import-substitution policy to develop light industries, such as textiles, and to resolve its balance of trade deficits. But, as in the case of Korea, economic growth was constrained by the limitations of the small Taiwan economy and by a military threat which required large defense expenditures. In addition, Taiwan's balance of trade deficits worsened. Taiwan was also heavily dependent on American aid for foreign reserves.

The Government implemented an agricultural reform program, under which it divided up large land-holdings and sold them to tenant

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16/ Kuo, Tai-chun. An Analysis of the Taiwan Experience: Policies and Social Factors. Issues and Studies. January 1985. p. 109.

17/ Liu, Fu-Chi. Studies in Monetary Development of Taiwan. Taipei. Academia Sinica. 1970. p. A19.

farmers. Some scholars have cited land reform as an important building block for Taiwan's eventual industrialization drive. 18/

Beginning in 1958 and into the 1960s, the government laid the foundation for an export promotion strategy which remains the basis for Taiwan economic policy today. By 1961, it reformed its multiple exchange rate system into a unitary system. In addition, the government devalued the local currency to improve the price competitiveness of Taiwan exports. 19/

The Nationalist Government also reformed some of the import controls to allow exporters to obtain inputs at world competitive prices. Quotas on imports of materials were loosened. 20/ Exporting companies could also obtain rebates on customs duties paid on imported raw materials. 21/ Like Korea, Taiwan still protects certain domestic industries from foreign competition through high tariffs and import controls.

Beginning in 1965, the Taiwan government established export processing zones, that is, specially designated areas in which the government leases factory space to exporting firms. These firms benefit from duty-free treatment on imported inputs without going through the bureaucratic red-tape of obtaining customs-duty rebates. They also obtain preferential access to utilities and receive tax incentives. 22/ The government added other export incentives as well: short-term loans for exporters at subsidized rates; tax exemptions on export-generated income; and cash awards for successful exporters. 23/

Taiwan has opened up its economy to foreign investment. The Statutes for Encouragement of Investment of 1960 provided assurances to foreign investors concerning expropriation. Since then, the government has added financial incentives: a five-year tax holiday, accelerated depreciation benefits, exemption from import duties, and

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18/ Ho, Samuel P.S. South Korea and Taiwan: Development Prospects and Problems in the 1980's. Asian Survey, December 1981. vol. 21. p. 1176.

19/ Scott, Maurice. Foreign Trade. in Galenson, Walter. ed. Economic Growth and Structural Change in Taiwan: The Postwar Experience of the Republic of China. Cornell University Press, Ithaca, New York, 1979. p. 331.

20/ Ibid., p. 331.

21/ Ibid., p. 325.

22/ Lin, Ching-yuan. Industrialization in Taiwan, 1946-72: Trade and Import-Substitution Policies for Developing Countries. New York, Praeger Publishers, 1973. p. 107.

23/ Scott, Foreign Trade, p. 342.

preferential treatment on site locations. 24/ The government has given preferences to investments which increase exports and the flow of technology. 25/

The role of exports in Taiwan's economy has grown appreciably during the last two decades. Exports accounted for about 10 percent of total GNP in 1961 and over 50 percent in the 1980s. Table 3 provides a picture of what this trend has meant for the rest of Taiwan's economy.

TABLE 3. Major Economic Indicators -- Taiwan
(Average annual growth rates)

	1961-65	66-70	71-75	76-80	81	82	83	84	85
Real GNP	8.8	9.2	7.8	10.0	5.7	3.3	7.9	10.9	4.7
Real Exports	12.9	23.6	17.1	21.2	10.0	2.7	18.6	15.7	N/A
Real Imports	13.2	17.6	13.0	12.4	-1.0	-15.2	13.1	2.1	N/A

Source: CRS calculations based on International Monetary Funds data. International Financial Statistics. Yearbook 1978 and 1979. Taiwan District. The Republic of China. Financial Statistics. The Central Bank of China. April 1985.

From the beginning of the 1960s through the 1970s, real exports grew about 15 percent per year on the average. Real GNP also grew at a very respectable rate of 7 percent per year on the average. The groupings of the years mask some difficulties Taiwan had in 1974 and 1975 when real GNP increased by only 0.6 percent and 2.4 percent, respectively. Real exports declined for the first time since 1960 in both of those years. The decline corresponded to the global recession associated with the oil crisis.

Taiwan's economy grew significantly in 1981, 1983, and 1984 led by high rates of growth in real exports. In 1982, a year of slow economic growth in the United States and other major export markets, real exports increased only 2.7 percent, which dragged real GNP growth down to 3.3 percent.

24/ SRI International. The Taiwan Development Experience and Its Relevance to Other Economies. p. 45.

25/ Ibid., pp. 45-46.

TABLE 4. Commodity Structure of Taiwan's Exports
(Percentages of total exports)

	1965	1975	1980	1984
Total	100.0	100.0	100.0	100.0
Non-Manufactures	57.5	18.7	11.9	6.1
Manufactures	42.5	81.3	88.3	93.9
Basic Manufactures	25.0	23.7	22.8	N/A
Machines & Transportation Equipment	4.4	19.6	23.6	N/A
Misc. Manufactures	8.3	36.1	39.1	N/A
Chemicals	4.8	1.9	2.8	N/A

Source: CRS calculations based on United Nations Trade data, TradeNet data retrieval system. 1984 data from The Republic of China. Board of Foreign Trade. 1985 Foreign Trade Development of the Republic of China.

In the mid-1960s, most of Taiwan's exports consisted of non-manufactured goods, generally food products. But as table 4 indicates, manufactured goods have been occupying increasing shares of total exports and account for over 90 percent today. While labor-intensive products make up increasing shares of manufactured exports, machines and transportation equipment have also been increasing their shares, a sign of Taiwan's industrialization.

C. Singapore

Singapore's economy has long been export-oriented because of its size and location. Throughout colonial rule under Great Britain (1819-1957), Singapore operated as an entrepot trade center: processing, repackaging, and re-exporting of primary products from Southeast Asia to the rest of the world and the re-export of manufactured goods from the industrialized countries to Asia. 26/

As a free-trade center, Singapore developed a highly efficient trade-related services sector: banking, insurance, and shipping. Revenue from these services allowed the local population to develop a standard of living higher than most of the other Asian countries. 27/

26/ Ropke, Jochen. The "Second Industrial Revolution" in Singapore. Asien, no.13, Oct. 1984. p. 47.

27/ Fong, Pang Eng and Linda Lim. Rapid Growth and Relative Price Stability. In a Small-Open Economy: The Experience of Singapore in Export-Oriented Development Strategies. p. 80.

But this legacy left the city-state port with few indigenous manufacturing capabilities to sustain its economy once trading patterns changed and once Singapore became independent.

For about eight years (1959-67), Singapore followed an import-substitution strategy of high protective tariffs and import controls for fledgling domestic light industries. This strategy permitted some growth, but the small economy could not sustain it. Singapore has returned to promoting its comparative advantage in exporting and has removed most of the import restrictions to allow for exporting firms to obtain inputs at competitive prices.

Singapore has encouraged foreign direct investment. Unlike many other developing countries, Singapore has not encumbered foreign investors with local equity participation requirements or other regulations which discourage foreign investment. In addition, the government has directed the allocation of foreign capital through incentives for foreign investment in targeted industries. 28/

Singapore has coupled its comparative advantage in exporting with foreign investment to develop an industrial base. Many multinational companies from industrialized countries have moved their operations to Singapore based on the favorable investment climate and low wage rates. Much of the development has been in assembly-type operations, especially electronics. Singapore is now entering a new phase of development in which it emphasizes capital- and technology-intensive industries, such as oil refining, petrochemicals, shipbuilding, electronics, and optics. 29/ The government has even forced wage rates upwards in an effort to encourage shifts of investments from labor-intensive to capital-intensive industries.

28/ Fong and Lim, p. 89.

29/ Low, Linda. The Role of Public and Private Investment in Regional Security and Economic Development. A paper given at "Pacific Basin Security: Economic Dimension," a symposium sponsored by the National Defense University. February 13, 1986.

TABLE 5. Major Economic Indicators -- Singapore
(Average annual growth rates)

	1966-70	71-75	76-80	81	82	83	84	85
Nominal GDP	14.5	18.3	12.7	18.2	11.3	10.1	10.1	-1.0
Nominal exports	9.9	31.9	29.1	7.9	-1.2	4.7	10.2	-4.4
Nominal imports	10.7	29.0	24.8	15.1	1.6	0.2	1.8	-11.0
Real GDP	13.3	9.6	8.7	9.9	6.3	7.9	8.2	-1.7
Real exports	N/A	N/A	16.8	3.0	3.9	8.4	16.4	-2.8
Real imports	N/A	N/A	11.9	12.0	8.0	0.8	4.1	-6.9

Source: CRS calculations based on data in International Monetary Fund. International Financial Statistics. TradeNet Computerized data retrieval system. Chase Econometrics. Far East Forecasts and Analysis. First Quarter 1986.

As table 5 shows, Singapore achieved impressive economic growth from 1966 to 1984. In fact, from 1968 to 1984, Singapore achieved continuous growth. During that period, real GDP increased at an average rate of 8.5 percent per year. Foreign trade has been the chief component. In 1984, the ratio of exports to GNP was 137 percent, reflecting the preponderance of economic activity devoted to domestic exports and entrepot trade. 30/

In 1985 Singapore incurred its first recession in two decades when real GDP declined by 1.7 percent. Official government reports cite a number of reasons for the sudden decline. Wage rates in Singapore have increased relative to labor productivity, causing Singapore's competitiveness in labor-intensive production to decline. In addition, Singapore's exports declined by 3 percent. During the previous export slump (1981-82), Singapore managed to maintain economic growth through public sector investment in construction. But apparently the economy has become saturated with such investments. 31/

30/ CRS calculations based on data in International Monetary Fund. International Financial Statistics. May 1986; U.S. Department of State. Foreign Economic Trends. Report from Singapore. Washington, September 1985. p. 2.

31/ Ministry of Trade and Industry. Republic of Singapore. Report of the Economic Committee. The Singapore Economy: New Directions. February 1986. pp. 38-41.

TABLE 6. Commodity Structure of Singapore's Domestic Exports
(Percentages of total exports)

	1965	1975	1980	1984
Total	100.0	100.0	100.0	100.0
Non-Manufactures	68.9	58.2	51.7	47.4
Manufactures	31.1	41.8	48.4	52.6
Basic Manufactures	11.9	8.5	8.3	7.2
Machines & Transportation Equipment	10.5	22.7	26.4	32.5
Misc. Manufactures	5.0	6.9	6.6	7.3
Chemicals	3.7	3.7	7.1	5.6

Source: CRS calculations based on United Nations trade data. TradeNet computerized data retrieval system.

Singapore's exports show a heavy concentration of non-manufactured goods. Much of these exports are in the mineral fuels sector, especially petroleum products. However, the table shows a trend towards increasing concentrations of manufactured goods, from about 31 percent in 1965 to over 50 percent in 1984. Furthermore, most of the manufactured goods exports are from the capital-intensive sector, machinery and transportation equipment, which may reflect Singapore's recent efforts to encourage capital-intensive sectors.

D. Hong Kong

From the establishment of British colonial rule in 1832 to the mid-1950s, Hong Kong operated as a center for entrepot trade between China and the United Kingdom. As in the case of Singapore, Hong Kong's role as a trade facilitator led to the establishment of a highly efficient and modern trade-services sector, that is, banking, communications, shipping, and insurance, but little in the way of indigenous manufacturing.

Several events in the 1950s disrupted Hong Kong's trade posture. The 1949 Communist takeover of the mainland led to the beginning of waves of Chinese immigrants to Hong Kong. The economic boycott of China by the Western countries following the Korean War drastically reduced the demand for Hong Kong's entrepot services.

From the late 1950s through the 1960s, Hong Kong developed its own manufacturing sector based on labor-intensive industries, such as textiles and wearing apparel. Hong Kong combined its comparative advantage in foreign trade, a legacy of its entrepot days, with its abundant supply of hard-working, skilled labor, a product of the massive Chinese immigration.

In contrast to the three other East Asian NICs, Hong Kong's industrialization efforts have not been the product of government-directed policies. Instead, the colonial government of Hong Kong has followed a policy of "positive non-interventionism." In other words, the government has not encouraged exports with incentives, nor has it imposed restrictions on imports. In addition, it has not directed investments into specific sectors but has allowed the market forces to decide the direction of production.

Entrepot trade has re-emerged as an important element in Hong Kong's economy since the 1970s. China's "open-door" policy, flourishing trade between the West and China, and the overall surge in East Asian commerce have increased demand for these services.

Hong Kong faces increasing competition from other Asian countries, including China, for markets in labor-intensive goods. Prosperity has led to higher wage levels in Hong Kong, reducing its comparative advantage in labor-intensive exports.

In a break with its non-interventionist tradition, the Hong Kong government has taken steps to encourage the development of domestic, capital-intensive industries. The government arranges industrial support facilities and technical services to help with diversification. A government advisory committee report indicated the government would have to help direct the economy, if Hong Kong is to compete in world trade. 32/

The role of the foreign trade sector in the Hong Kong economy is significant, and, as in the case of the other three East Asian NICS, is growing. In 1975, the ratio of exports to GDP was 75 percent. In 1985 it reached over 100 percent, which reflects the importance of domestic export and re-export activity. Between the same two years, the import/GDP ratio also increased from about 75 percent to over 100 percent. 33/ The role of re-exports has also increased with the demand for Hong Kong's entrepot services. Between 1975 and 1985 the share of re-exports in total Hong Kong exports grew from 23 percent to about 45 percent. 34/

32/ Nyaw, Mee-Kau and Chan-leong Chang. Structure and Development Strategies of the Manufacturing Industries in Singapore and Hong Kong: A Comparative Study. Asian Survey, v. 22, May 1982. p. 463-464.

33/ CRS calculations based on data in Chase Econometrics. Far East Forecasts and Analysis. Third Quarter 1985 and Long-term Update and First Quarter 1986.

34/ Ibid.

TABLE 7. Major Economic Indicators -- Hong Kong
(Average annual growth rates)

	1966-70	71-75	76-80	81	82	83	84	85
Real GDP	7.9	5.4	12.4	9.4	2.9	6.5	9.4	3.7
Real Exports of Goods & Services	13.1	4.0	15.5	13.9	-1.9	13.7	25.0	-1.6
Real Imports of Goods & Services	11.4	4.8	17.8	12.8	-1.8	9.9	18.0	2.5

Source: CRS calculations based on data in United Nations Yearbook of National Accounts Statistics. 1976 and 1982. (for 1966-1980 figures). Chase Econometrics Forecasts and Analysis. Far East. First Quarter 1986 (for 1981-85 figures).

The data in table 7 illustrate the importance of the trade sector in the Hong Kong economy. During the 1966-70 and 1976-80 periods, real exports of goods and services increased at robust rates of about 13 percent and 16 percent, respectively. During the same two periods, real GDP grew at about 8 percent and 12 percent. Exports grew at a more rapid rate than the economy as a whole, suggesting that they may have acted as an engine of growth. In the 1971-75 period, the export sector probably dragged the economy, since they increased by only 4 percent, while real GDP grew slightly above that rate, at 5 percent per annum on the average.

The relationship has carried forward into the most recent years, as real GDP increased at very high rates in 1981 (9.4 percent), 1983 (6.5 percent) and 1984 (9.4 percent) led by high rates of export growth during those years. Declines in real exports in 1982 and 1985 appeared to drag the economy into low growth.

TABLE 8. Commodity Structure of Hong Kong Exports
(Percentages of total exports)

	1965	1975	1980	1984
Total	100.0	100.0	100.0	100.0
Non-Manufactures	6.5	3.0	3.8	3.9
Manufactures	93.4	97.2	96.0	95.1
Basic Manufactures	22.0	13.5	11.3	10.0
Machines & Transportation Equip.	6.8	14.6	17.5	23.4
Misc. Manufactures	63.5	68.1	66.4	61.7
Chemicals	1.1	1.0	0.8	0.0

Source: CRS calculations based on United Nations Trade data obtained from the TradeNet data retrieval system.

Well over 90 percent of Hong Kong's domestic exports have been manufactured goods. Over the years, labor-intensive products (basic and miscellaneous manufactures) have accounted for 70-80 percent of the exports. Table 8 shows, however, that capital-intensive exports (mainly machinery and transportation equipment) are occupying growing shares indicating Hong Kong's industrialization.

In 1984 the United Kingdom and the People's Republic of China reached an agreement concerning the return of sovereignty over Hong Kong to China in 1997. According to the agreement, the PRC will permit Hong Kong to maintain its market-oriented economy for at least 50 years after its return to Chinese control.

IV. SOME COMPARISONS

This overview of the economic development records of the four East Asian NICs reveals some similarities, which may shed light on the factors underlying the NICs' economic successes over the past two decades. All four countries have used their export sectors as the main driving force for growth and development. In Korea and Taiwan, the importance of exporting has grown over the last two decades to become the major factor in the economies. Exporting has played a vital role in Hong Kong and Singapore for the past two centuries by virtue of their positions as important ports and trade centers. In all four countries the health of the overall economies depends in large part on the health of the exporting sectors.

In addition, all four countries have been developing their industrial bases largely through the trade sector. In the past, they imported capital-intensive goods and technology and exported labor-intensive goods. To varying degrees, the East Asian NICs now produce more capital-intensive goods, a sign of further industrialization.

In three East Asian NICs -- South Korea, Taiwan, and Singapore -- the government has been a determining force in economic develop-

ment.. The governments of Taiwan and South Korea shifted the courses of economic growth and development in the 1960s and have since fostered exports through a program of tax benefits and other incentives. They both still protect fledgling domestic industries through import controls and restrictions on foreign investments, which offset some of the aggregate trade effects of the export subsidies. Singapore's government has maintained a "hands-off" posture on foreign trade but has influenced the direction of domestic and foreign investments into industries it deems vital to economic development.

Only Hong Kong's government has followed a virtually free-market economic policy. But even Hong Kong shows signs of retreating from its traditional policy of "positive non-interventionism."

Over the past two decades all four NICs have experienced relative political stability, which may have contributed to their economic success. One exception was the assassination of South Korean President Park, which some analysts have cited as a factor in Korea's brief economic slowdown in the early 1980s. British-Chinese negotiations over Hong Kong's future may have led to some uncertainty in that city-state. The four NICs have not incurred any severe external political or military crises during this period, although South Korea and Taiwan maintain large, well-equipped armed forces to defend themselves against military threats. The four countries benefited from increase commercial activity in the region resulting from the Vietnam war in the 1960s and 1970s.

The four East Asian NICs are resource poor but labor abundant. Therefore, they could not rely on exports of primary commodities, such as petroleum, for foreign exchange. They developed their labor-intensive manufacturing industries, because they had nothing else. Prices for manufactured goods are generally less volatile than primary commodities; therefore, the four East Asian NICs have avoided some of the uncertainties that Mexico, Indonesia, and other petroleum producers have faced.

Analysts have cited other similarities, for example, the Confucian heritage which the four East Asian NICs share. They specifically cite its emphasis on education, discipline and hard work as a possible factor in their economic successes.

V. THE ROLE OF THE UNITED STATES AND ITS POLICY IMPLICATIONS

South Korea and Taiwan have been dependent on U.S. arms and the special protection the United States has extended because of their vital importance to U.S. national interests. This armed support undoubtedly has helped create an environment in which the two NICs could perpetuate their economic success.

Aside from the military support, the United States has been a significant factor in the economic success of the East Asian NICs by virtue of its role as their most important export market. In recent years, the United States has bought roughly one third of the exports and has ranked as the number one export market. Moreover, these

purchases have included about 40 percent of total manufactured exports from the East Asian NICs. Japan has bought about 10 percent of the NICs' exports and has ranked number two as an export market (except for Singapore where it ranks number three behind Malaysia.) 35/

Because of American dominance as an export market, the East Asian NICs are very sensitive to economic developments in the United States, such as growth rates, and to policies which could affect their access to the U.S. market. Strong U.S. economic growth can help bolster the NIC economies as it generates demand for their exports. U.S. recessions can impede NIC economic growth.

Recent U.S. steps to limit imports affect the access of some East Asian NICs to the U.S. market, especially in manufactured goods. The United States is now negotiating new, lower import quotas on textiles, a major export from Hong Kong, South Korea, and Taiwan. The United States has also negotiated bilateral agreements with South Korea and other steel producers, to limit shipments to the United States, from October 1, 1984 to September 30, 1989. The agreement limits Korea's penetration of the finished steel market in the United States to a 1.9 percent share and U.S. imports of semi-finished steel from South Korea to 50,000 tons. 36/ The United States concluded these agreements because of the American steel industry's concern with the rapid growth of competiton from foreign steel producers.

The four NICs have relied on imports of capital-intensive goods and technology to develop their industrial bases. The United States has ranked number two in the four East Asian NIC markets as an import supplier. It accounted for 18 percent of total East Asian NIC imports in 1984. Japan has been the number one import supplier, having accounted for over 25 percent. 37/

The seeming disparity in the U.S. positions as a purchaser of exports and supplier of imports to the East Asian NICs has concerned some U.S. industries and policymakers, particularly over the last few years as the U.S. trade deficits have reached record-breaking levels. In 1985, the United States incurred a $25 billion total trade deficit with the four East Asian NICs, which represented about 17 percent of the $148.5 billion total trade deficit for the United States in 1985

35/ CRS calculations based on data in International Monetary Fund. Direction of Trade Statistics. 1985 Yearbook. Taiwan data contained in The Republic of China. Board of Foreign Trade. Foreign Trade Development of the Republic of China. 1985.

36/ U.S. Library of Congress. Congressional Research Service. The President's Steel Program: Background and Implementation. Report No. 86-658 E, by David J. Cantor. Washington, April 1, 1986. p. 5.

37/ Ibid.

and equaled over 50 percent of the $49.7 billion U.S. deficit with Japan. 38/

The Congress and the Executive Branch have tightened eligibility requirements for some East Asian NICs and other advanced developing countries under the Generalized System of Preferences Program for duty-free treatment. Under the Trade and Tariff Act of 1984, imports of certain products from advanced developing countries can be denied GSP benefits, if their total value exceeds $25 million or 25 percent of total U.S. imports of that product. 39/ This threshold is lower than that for other GSP recipients. The United States is also pushing South Korea and Taiwan to reduce barriers to U.S. exports that protect domestic industries and become full, participating members in the international trading system.

VI. OUTLOOK FOR THE REMAINDER OF THE 80s

The economic outlook for the East Asian NICs depends on a number of factors. The East Asian NICs will probably continue to rely on exporting as the chief impetus to economic growth and development. The United States will probably remain their number one export market. Therefore, economic conditions within the United States will be a factor. Robust U.S. economic growth will generate demand for imports which will feed East Asian NIC economic growth. On the other hand, a sharp slowdown or recession, especially over an extended period of time, could hinder those prospects. The NICs could rely on increases in government spending, private consumption, and public sector and private sector investments to mitigate the effects of a slowdown in the export sector. But given the importance of exporting to all four economies, such remedies would only be short-term solutions. The East Asian NICs will also be sensitive to economic conditions in Japan and the other industrialized countries.

Access to export markets will be another determining factor. Over the next few years, the East Asian NICs will closely watch U.S. policymakers grapple with the trade deficit problems. They will be sensitive to any moves to limit U.S. imports, particularly in those sectors in which they have achieved a comparative advantage, such as textiles, footwear, and electronic assembly, or those in which they could become competitive, such as steel and autos. The NICs will look to increase their access to markets in Japan, the European Economic Community and other industrialized countries. If Japan's economic strategy becomes domestic-oriented, it could create export opportunities for the NICs.

38/ CRS calculations based on data in U.S. Department of Commerce. International Trade Administration. Business America, March 17, 1986. p. 5.

39/ Section 505. Trade and Tariff Act of 1984. Public Law 98-573.

Hong Kong, Korea, and Taiwan are dependent on foreign energy sources. The recent oil glut has been a boon to their progress. Continued low prices would brighten their economic prospects. But sharp increases in world oil prices, similar to those of 1973-74 and 1978, could severely hamper those prospects. The NICs managed to survive the previous crises without severe damage to their economies. But as they become more capital-intensive, their dependence on petroleum will increase as will their vulnerability to future oil price shocks.

The oil picture for Singapore is mixed. Singapore has developed oil refining into a major industry, and thus is affected inversely by the world oil situation. But as it becomes more industrialized, it too may benefit from cheaper oil.

Over the past two decades, the East Asian NICs have maintained exchange rates that benefited their exports. They have devalued their currencies against the dollar and tied their exchange rates to the U.S. dollar or a basket of currencies, which has helped maintain the price competitiveness of their exports in the United States. Exchange rate policies will remain an important factor in economic prospects for the remainder of the 1980s. In addition, Taiwan and Korea compete with Japan for shares of the U.S. market in some commodities. The current appreciation of the yen against the dollar, has made Japanese products more expensive in the U.S. market and increased the attractiveness of Korean and Taiwanese goods.

The East Asian NICs face strong competition from other Asian countries, including the ASEAN members and China, in labor-intensive production. The economic prospects of the NICs, therefore, will depend on their ability to become competitive at higher stages of industrialization.

The East Asian NICs face political and military uncertainties the outcome of which will help determine their economic progress for the remainder of the 1980s. Taiwan confronts the prospect of powerful, aging leaders leaving the scene in the near future. The South Korean leadership faces challenges from dissidents. Hong Kong prepares for its return to China. How the East Asian NICs manage these uncertainties will be a factor in their economic prospects.

CHAPTER 4

INDONESIA, MALAYSIA, THE PHILIPPINES, AND THAILAND*

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* Prepared by Larry A. Niksch, Specialist in Asian Affairs, Foreign Affairs and National Defense Division, Congressional Research Service.

I. BACKGROUND: THE COLONIAL LEGACY

Indonesia, Malaysia, the Philippines, and Thailand are sometimes described as a potential second wave of Asian NICs which have adopted the export-led growth strategies of Japan, South Korea, and Taiwan. There is truth in this assertion, but it misses the key point that the economies of these countries were export-oriented long before the 1960s when the NICs began to emerge. During the periods of colonial rule in Indonesia, Malaysia, and the Philippines, the patterns of economic development imposed by the colonial powers stressed the export of agricultural commodities and natural resources. Such exports provided needed and inexpensive products for the domestic economies of the colonial powers or were used as major income earners for the colonial powers in other developed markets. 1/

In Indonesia, for example, the Dutch government and later private interests created a huge system of plantations for export crops like coffee, sugar, indigo, tea, palm oil, and tobacco. British rule in Malaysia saw the country's wealth dependent on exports of tin and rubber. The economic legacy of American rule of the Philippines was an export crop economy oriented towards the American market. Sugar, coconuts, lumber, and abaca constituted the main lines of production. Even Thailand, which retained its independent status, allowed (sometimes under pressure) British business interests to develop the tin, rubber, and logging sectors.

All of these countries had two sectors by the eve of World War II: a modern export sector and a subsistence agricultural sector. There was little industry except for processing plants for export commodities. Most manufactured products were imported, mainly from the colonial power under tariff-free arrangements.

These systems were exploitative in many ways and prevented a more rounded economic development. They did, however, provide substantital benefits as well such as large-scale employment in the commodity sector (both on the plantations and among individual producers of commodities on small plots, so-called small-holders), the development of an indigenous commercial class (often, though, ethnic Chinese), considerable infrastructure, and the flow of some export income back into the indigenous economy.

Though the nations had achieved independence, the "colonial pattern" prevailed in the four economies in 1960. Indonesia suffered from misrule under Sukarno, with little new economic development and the existing sectors in decline. Malaya gained independence in 1957 (the Federation of Malaysia was formed in 1963) with the economy dependent on tin and rubber. The Philippines had developed a more varied industrial sector by 1960, but it was geared to the domestic market and was dependent on imports of equipment and raw materials.

1/ For a discussion of the Southeast Asian economies under colonial rule, see Pluvier, Jan. South-East Asia from Colonialism to Independence. Kuala Lumpur, Oxford University Press, 1974. p. 3-71.

Foreign exchange earnings relied on commodities and natural resources, and these were insufficient to finance needed imports. Thailand differed from the other three in that it had a major rice-exporting sector, but other features of its economy were similar to Indonesia, Malaysia, and the Philippines.

II. ECONOMIC DIVERSIFICATION, 1960-1980

Diversification of the export sector was a key element of the economic strategy of the four countries during the 1960-1980 period. It was this period in which the present national economies of these nations were shaped. The degree of diversification varied from country to country, but diversification had four aspects: (1) the development of new lines of commodity exports; (2) attempts to upgrade the commodity sector with processing of raw products into finished goods; (3) more emphasis on energy exports, and (4) the development of labor intensive industries aimed at foreign markets.

Diversification was greatest in Malaysia and Thailand. Malaysia created palm oil and timber-producing sectors which became at least as important as rubber and tin as foreign exchange earners. By 1980, Malaysia was the world's largest producer of palm oil and accounted for about 65 percent of world trade in the product. 2/ Processing facilities were integrated into the production processes for palm oil and rubber. Other industries arose in textiles and garments, electrical machinery, and electronics products (semi-conductors and integrated circuits). Free trade zones were established for export-oriented manufacturing where manufacturers could import raw materials and machinery duty free. Malaysia also developed its oil and natural gas into a major export line. 3/

In Thailand, too, new agricultural commodities, like tapioca, maize and sugar, emerged as major exports by 1980. The Thai government, with assistance from the World Bank, conducted a massive replanting of rubber trees in the 1970s to revitalize that sector. Production and processing of pineapples for export boomed in the 1970s. Thailand's industry did not diversify to the extent of Malaysia's industries, except for commodity-processing plants. Textiles, however, was a growth industry of the 1960s and 1970s, and it accounted for nearly 25 percent of industrial production by the early 1980s. 4/ Manufacturing as a whole increased from seven percent of Gross Domestic Product (GDP) in 1951 to 18.6 percent in 1985. 5/

2/ Low, Linda. Malaysia Economy. The Far East and Australasia. London, Europa Publications, Ltd., 1986. p. 604.

3/ Ibid., p. 604-607.

4/ Dixon Chris. Thailand Economy. The Far East and Australasia. London, Europa Publications, Ltd., 1986. p. 915.

5/ Ibid.

The pattern in the Philippines differed in two respects. First, there was little diversification in the commodity sector. Coconuts, sugar, and copper continued to dominate. Bananas, pineapples, and other processed fruits entered the picture as export crops. The processing of copra into coconut oil made the latter a more important export product than the former.

Philippine manufacturing remained oriented primarily toward the domestic market. Industry had developed in the 1950s as a result of the government's policies of protecting domestic manufactures from foreign competition. These industries, however, were heavy importers of raw materials and machinery, helping to create frequent, large current account deficits. 6/

The Philippine government adopted policies in the 1970s designed to promote export-oriented manufactures, and some enterprises were established. Most industrial growth in the second half of the 1970s and early 1980s occurred in electronics, textiles and garments, and furniture. The electronics industry expanded exports from $12 million in 1972 to over $1 billion in 1982. Philippine semi-conductor firms reportedly assembled 20 percent of the world's output by the early 1980s. Exports of textiles and garments increased to $540 million in 1982. 7/

Diversification was least in Indonesia during the 1960-1980 period. This was partly due to the economic shambles that the Suharto government inherited from the Sukarno regime after 1965. The Suharto's government's initial strategy was aimed at financial stability, bringing triple-digit inflation under control, and increasing rice production. Moreover, the government foresaw the growing importance of oil and natural gas to the world, and its emphasis on the energy sector was reinforced by the 1973 world energy crisis. As a result, the export sector after 1973 was dominated by energy. By the end of the 1970s, petroleum and natural gas made up close to 80 percent of Indonesia's total exports and provided two-thirds of the government's revenues. The agricultural commodity sector, which had provided 70 percent of exports in 1969, was neglected for the most part. Despite favorable world market prices in the 1970s, rubber production increased only 1.1 percent per year on the average for that decade. Similar slow growth occurred in production of coffee, copra, tobacco, and tapioca. The only marked production and export increases occurred in sugar and palm oil. Timber exports also rose considerably, but not at the same pace as energy exports. 8/

The Suharto government's second five year plan (1974-79) placed little emphasis on the development of a labor intensive, export oriented

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6/ Dios, Emmanuel S. An Analysis of the Philippine Economic Crisis. Manila, University of the Philippines Press, 1984. p. 10.

7/ Turley, T. M. Philippine Economy. The Far East and Australasia. London, Europa Publications, Ltd., 1986. p. 821, 831.

8/ Buchanan, Ian. Indonesia Economy. The Far East and Australasia. London, Europa Publications, Ltd., 1986. p. 434-439.

industry. It was not until the third plan that diversification toward export industries (textiles, shoes, electronics, processed food, and processed lumber) became an integral part of development strategy.

Several factors influenced the Malaysian, Thai and Philippine governments, and subsequently, the Indonesian government, to embark on a strategy of export diversification. One was the Kennedy Round trade negotiations held in 1964 among 53 nations representing 80 percent of all world trade. The Kennedy Round produced agreements for tariff cuts, averaging 35 percent for all participants, on a broad range of industrial products; lowered tariffs on agricultural products; and produced agreement by the developed countries (the United States, Japan, and Western Europe) to reduce barriers to exports from developing countries. 9/ The result was a liberalized international trading environment that opened up opportunities for exports from the Southeast Asian countries, especially of manufactured and processed products.

A second factor was the influence of the World Bank and International Monetary Fund. All four countries drew on the lending facilities of these institutions and thus were influenced by the conditions imposed on them by the institutions. The World Bank and IMF invariably advocated a diversification strategy stressing a relaxation of trade barriers and the development of export industries.

IMF and World Bank influence increased after the first oil crisis in 1973. Sharply rising oil prices and worldwide inflation pushed the value of imports up sharply for all four countries, but especially the Philippines and Thailand. The resultant current account deficits forced them to draw on the IMF for balance of payments assistance. Part of the IMF formula was for these countries to export their way out of these deficits.

This view was easily adopted by the Western educated technocrats who came on the scene in the 1960s to direct economic policy in the ASEAN countries. Indonesia's "Berkeley Mafia" gained a unique fame, but economists educated in the United States and Great Britain have had nearly equal influence in the other countries. All were oriented toward free market ideas, including the opportunities of the liberal trading system.

Finally, all four countries were oriented politically toward the West. The Philippines and Thailand were treaty allies of the United States. Malaysia had defense ties with Great Britain, Australia, and New Zealand. Indonesia had no formal defense ties with Western countries, but the Suharto government, reversing the Sukarno posture, looked to the United States for military and economic assistance and kept ties with the Soviet Union and China at minimal levels.

9/ U.S. Department of State. The Trade Debate. Washington, D.C., 1979. p. 7.

There can be little question that this political orientation influenced the economic and trade policies of these governments. The political influence of the United States and other Western countries flowed into economic issues. U.S. and Western economic aid programs produced a steady dialogue on the recipient countries' economic policies. Consultative groups of aid-giving Western countries were formed, and these groups formalized the dialogues into periodic reviews of the recipient countries' economic performances and policies. Furthermore, Thailand, Malaysia, and the Philippines successfully fought serious communist insurgencies, and Western aid was critical to the victory of the established leaderships.

III. THE ECONOMIES IN THE 1980s

A. Indonesia

Indonesia's economy is the least developed of the ASEAN economies. The country is rich in natural resources, and the economy grew at a respectable rate of nearly eight percent per year after 1970. The key to this growth was rising prices for Indonesia's oil exports. GDP growth, however, fell to 2.2 percent in 1982 as oil revenues declined. The growth rate rose to 3.0 percent in 1983 and 5.8 percent in 1984 but fell to 2.5 percent in 1985 due again to falling demand and prices for petroleum exports. The rapid drop in world oil prices in early 1986 foretold a further decline in GDP growth, probably to around one percent.

Indonesia remains poor. Over 40 percent of Indonesia's 160 million people fall below the World Bank's "absolute poverty" base. 10/ The major problems are overpopulation (an estimated 160 million people), limited agricultural output, and weak manufacturing and export sectors except for petroleum.

The population problem is compounded by the fact that the island of Java, with one-thirteenth of the country's total area, contains almost two thirds of the population. Population density in rural Java is about 565 people per square kilometer (or 1465 people per square mile). This, coupled with disparities in land ownership and the large number of landless peasants, has resulted in widespread rural poverty and unemployment. A vigorous government program to control the population has reduced the growth rate from nearly three percent in the mid-1960s to an estimated 2.1 percent in 1984. 11/ Moreover, observers have noted some improvement in living standards in rural Java in areas such as quality of housing, production, and availability and access to consumer goods. Nevertheless, Indonesia faces the formidable task of absorbing 1.8 million new job seekers annually into the labor force.

10/ U.S. Agency for International Development. Congressional Presentation, Fiscal Year 1986. Annex: Asia. p. 91.

11/ Ibid., p. 86

Agriculture accounts for about 28 percent of Gross Domestic Product and employs over 55 percent of the labor force. Production of rice, the main food crop, has risen from 12.3 million tons in 1969 to over 25.8 million tons in 1984. This has brought Indonesia closer to self-sufficiency in rice, but the country has had to import large amounts of rice annually in recent years. Production of other food crops has not grown as rapidly and has stagnated in some cases.

Manufacturing accounts for about 13 percent of GDP and employs about nine percent of the labor force. Industrial production has risen rapidly since 1970, but this has been mainly in capital-intensive industries such as cement, fertilizer, and petrochemicals. Labor-intensive and commodity processing industries remain relatively weak.

Exports make up nearly 25 percent of Gross National Product. Oil and natural gas are the most important exports ($13.9 billion in the 1984-1985 fiscal year, composing 65 percent of the overseas sales and 60 percent of the government's revenues). 12/ Non-oil export earnings--primarily from coffee; rubber; wood and wood products; and, very recently, palm oil, textiles, and electronics--have grown more slowly to an estimated $6.1 billion in the 1985-86 Indonesian fiscal year. Manufactured goods comprise only about seven percent of total exports, well up from the percentage of the late 1970s but still low.

B. Malaysia

Malaysia has made substantial progress in the last ten years, and its per capita GNP of over $1,900 is one of the highest in Asia. Economic growth averaged nearly eight percent per annum during the 1970s and over five percent so far in the 1980s. The level of growth and government policies have resulted in a broadening distribution of economic benefits. Using the Malaysian government's standard, the incidence of poverty declined from 49 percent of the population in 1970 to 29 percent in 1980. 13/ Urbanization has been rapid, with city dwellers now approaching 40 percent of the population. Rural poverty, however, remains a problem, particularly among rice farmers and rubber workers.

An industrial base has arisen to complement the production of oil and raw materials such as tin, rubber, lumber and palm oil. Manufacturing output accounts for over 20 percent of Gross Domestic Product and has been the major source of growth in the economy since 1975. 14/ The electronics sector

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12/ U.S. Department of Commerce. Foreign Economic Trends and Their Implications for the United States: Indonesia. Washington, U.S. Government Printing Office, 1985. p. 5.

13/ The Far East and Australasia, 1982-1983. London, Europa Publications, Ltd., 1984. p. 741.

14/ U.S. Department of Commerce. Foreign Economic Trends and their Implications for the United States: Malaysia. Washington, U.S. Government Printing Office, 1986.

has become especially important as a growth industry, an exporter, and an employer (80,000 employed in 1985). Nearly all U.S. semi-conductor companies have operations in Malaysia. 15/

Industry has been the main provider of new employment in recent years. Annual increases in employment in manufacturing since 1975 have been near ten percent or higher. This resulted in a steadily declining rate of national unemployment in the late 1970s into the early 1980s. By 1985, manufacturing accounted for over 15 percent of the total labor force.

Agriculture remains the major component of the economy, accounting for over 20 percent of GDP and employing 35 percent of the labor force. Food production had developed to a point where Malaysia produced 80 to 90 percent of its food needs compared to 55 percent at the time of indepedence in 1957, but recent delines reduced the percentage to about 60 percent.

Malaysia's economy is dependent on commodity exports of petroleum, rubber, palm oil, timber products, and manufactured articles. Exports account for over 50 percent of Gross National Product. 16/ Because of the growth of industry, manufactures now account for over 30 percent of total exports, compared to about 20 percent at the end of the 1970s.

C. Philippines

The Philippines today faces the most serious economic crisis in its modern history. 17/ Gross National Product declined by over five percent in 1984 and over three percent in 1985. Economic forecasters predict a further decline in 1986. The crisis has many components which feed upon one another. The inability of the Philippines to pay its foreign debt resulted in a cutoff of foreign capital for nearly two years. The business sector, which utilized foreign capital to finance imports, has been crippled, operating at below 50 percent of capacity. Little new investment has occurred since late 1983. Unemployment is at a rate of 20 percent, according to the Philippine government, and underemployment approaches 50 percent of the remaining adult work force. Government austerity measures taken in response to the debt situation sent interest rates for private borrowers to over 30 percent in 1985, and rates remain close to 20 percent as of July 1986.

External trade was a major factor in creating the conditions that led to the present crisis, and it has contributed to the prolongation of the economic depression. Dependence on imported oil resulted in escalating imports bills from 1973 to 1983, distortions of the import sector, and strains on Philippine financial resources. The cost of imported oil, for example, climbed from $890 million in 1976 to $2.4 billion in 1981, before

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15/ Ibid.

16/ Low, Malaysia Economy. p. 607.

17/ Dios, An Analysis of the Philippine Economic Crisis. p. 2-15.

it began to level off. At this peak, oil accounted from over 30 percent of the value of all imports.

A second factor was the decline in international prices for all major primary product exports after 1979: coconut oil, sugar, copper, and timber and wood products. The coconut sector was hit especially hard. Exports of coconut oil and copra fell from $832 million in 1979 to $437 million in 1985. This had a devastating effect on domestic living standards since about 30 percent of all Filipinos (about 15 million people) are dependent in whole or in part on the coconut sector. Sugar exports fell from $416 million in 1981 to $218 million in 1985. Sugar-producing regions, especially Negros, have experienced severe hardships, including malnutrition among the families of hundreds of thousands of sugar workers. In addition to the impact of international prices, many observers asserted that government-imposed monopolies on the coconut and sugar sectors distorted the markets for those products and prevented producers from realizing full profits.

Copper was the third product to experience a sharp downturn in international price levels. Exports of copper reached a height of $679 million in 1980 before plummeting to $88 million (estimated) in 1985.

Manufactured exports have been a bright spot in the Philippine economy since 1979. Exports of electronics and electrical equipment shot up from $95 million in 1981 to $850 million in 1984 before dropping to slightly over $700 million (estimated) in 1985. Clothing exports increased from $217 million in 1979 to $407 million in 1981; since then, the level has been around $400 million. By 1985, exports of all manufactured products totalled an estimated $2.4 million, well over 50 percent of the total estimated exports of $4.5 billion. 18/

D. Thailand

Thailand's economy has benefitted from a rich agricultural base, a large labor force, and the absence of problems associated with overpopulation. The economy grew by over seven percent annually in the 1970s and around five percent annually so far in the 1980s. According to World Bank estimates, the incidence of poverty fell from about 57 percent of the population in the 1960s to 25 percent in 1984. 19/

Agriculture dominates the Thai economy, accounting for over 20 percent of GDP and two-thirds of the labor force. Rice is the most important crop, but tapioca (cassava), maize, sugar, and pineapple production expanded rapidly in the 1970s and early 1980s. Rubber is an important crop, produced

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18/ U.S. Department of Commerce. Foreign Economic Trends and their Implications for the United States: Philippines. Washington, U.S. Government Printing Office, 1985. pp. 9-10.

19/ Agency for International Development. Congressional Presentations for Fiscal Years 1982 and 1985. See Annexes for Asia, section on Thailand.

in the south on smallholdings. Tin is the major mineral produced in Thailand.

Thai industry is composed mainly of processing plants for primary products: rice mills, tapioca processing, fruit canning, etc. Textiles and garments have become the major non-primary growth industry. Manufacturing growth has been steady, and the sector contributes nearly 20 percent to GDP and employs over ten percent of the labor force, or slightly over two million people. 20/

The external trade sector has two important elements. The first is Thailand's heavy dependence on foreign oil. The rise in oil prices of the 1970s resulted in steadily increasing Thai outlays for imported oil. Petroleum accounted for over 31 percent of Thailand's imports in 1981. The percentage subsequently declined due to falling oil prices and the substitution of domestically produced natural gas. Nevertheless, it still accounted for 22 percent of all imports in 1985.

The second element is the importance of primary products, processed and unprocessed, in the export sector. Four products--rice, tapioca, sugar, and rubber--made up about 35 percent of all exports in 1985. 21/ Products like processed fruit, tin, and maize bring the total close to 50 percent. In the manufacturing sector, textiles has become the major non-primary product with significant export growth, now making up about ten percent of total exports. Total exports comprise about 25 percent of Thai Gross National Product.

IV. FOREIGN DEBT ISSUES

Foreign debt emerged as a significant economic problem to the four ASEAN countries in the 1980s. The Philippines has experienced a debt re-payment crisis similar to those of a number of Latin American countries. Malaysia, Indonesia, and Thailand do not appear to be in acute danger at this time, according to knowledgeable bankers and economists, but the experts also stress that the debt problem in each of them has worsened and bears watching.

The origins of the problem lie in the second oil shock of 1979 and the subsequent international recession of 1980-1982. The sharp rise in world energy prices in 1979 resulted in a new round of import price increases for all of the countries. As the world recession set in, commodity prices plummetted for sugar, coconuts, tin, rubber, tapioca and other key exports of the ASEAN states. Oil prices subsequently began to fall with significant effects on Indonesia's export earnings.

20/ Dixon, Thailand Economy. p. 915.

21/ Wharton Econometric Forecasting Associates. Asian Economic Outlook, April 1986. p. 161.

This situation produced rising current account deficits, and the fall in export earnings and general economic performance put added pressure on the budget deficits of ASEAN governments. Governments resorted to increased foreign borrowings to fill these gaps. Foreign debts thus have risen for all of them. The following tables show the current account situation for each of the four countries from 1981 through 1986 and the size of their overseas debts and debt service ratios.

TABLE 1. Current Account Deficits, 1981-1986
(billions of dollars)

	1981	1982	1983	1984	1985	1986 (est.)
Indonesia	.6	5.3	6.3	2.1	2.3	3.1
Malaysia	2.5	3.6	3.4	1.6	.9	1.7
Philippines	2.2	3.2	2.8	1.3	.8	.7
Thailand	2.6	1.0	2.8	2.1	1.6	1.6

Source: Wharton Econometrics Forecasting Associates

TABLE 2. External Debts (1981-1986)
(billions of U.S. dollars)

	1981	1982	1983	1984	1985	1986 (est.)
Indonesia	19.9	25.5	28.8	33.5	34.5	37.5
Malaysia	7.4	10.1	13.6	14.9	15.6	17.0
Philippines	20.3	24.5	24.9	24.4	25.6	27.0
Thailand	10.8	11.7	12.5	15.3	16.8	18.3

Source: Wharton Econometrics Forcasting Associates

TABLE 3. Debt Service: Principle & Interest as Percentage of Export Earnings, 1981-1986

	1981	1982	1983	1984	1985	1986 (est.)
Indonesia	10.0	12.6	15.5	19.0	25.2	26.4
Malaysia	5.1	7.1	8.5	8.0	9.1	11.1
Philippines	26.2	37.2	39.6	18.0*	35.7	41.9
Thailand	26.0	37.1	24.0	21.5	22.4	28.0

* Reflects moratorium on principal payments granted by lending banks.

Source: Wharton Econometrics Forecasting Associates

The economic policy response of the Indonesian, Malaysian, Phillippine, and Thai governments have contained common elements, although they vary in intensity and in details. The main elements of the reactions are:

(1) Austerity at home: Either on their own initiative or under pressure from the International Monetary Fund, the ASEAN governments have restricted public spending. Economic development projects and programs have been postponed or cancelled.

(2) Restrictions on imports: The governments have raised duties on imports, imposed quotas, limited credit to private sector importers, and frozen construction projects in order to reduce imports of capital equipment.

(3) Governments have placed quantitative limits on foreign borrowing. Consequently, economic growth rates have tended downward in the 1980s. The following table shows the rates of GDP growth for the four ASEAN countries from 1981 through 1986:

TABLE 4. Rates of Growth in Gross Domestic Product, 1981-1986
(percent)

	1981	1982	1983	1984	1985	1986 (est.)
Indonesia	7.9	2.2	4.2	5.8	2.5	1.3
Malaysia	7.1	5.6	5.9	7.3	2.8	2.7
Philippines	3.8	3.0	1.0	-4.5	-3.7	-1.3
Thailand	6.3	4.2	5.8	6.0	4.1	3.8

Source: Wharton Econometrics Forecasting Associates.

Given domestic austerity, the dependence of these countries on exports for economic growth has grown. The importance of the U.S. economy and market, moreover, has increased relative to other importing countries. The year 1984 demonstrated this. U.S. economic growth for 1984 reached an impressive 7.1 percent. U.S. imports from the ASEAN countries also showed healthy increases as compared to 1983: Indonesia: $4.51 billion in 1983 to $5.65 billion in 1984; Malaysia: $2.20 billion in 1983 to $2.82 billion in 1984; Philippines: $2.16 billion in 1983 to $2.62 billion in 1984; Thailand: $1.0 billion in 1983 to $1.42 billion in 1984. Growth rates, as shown by the previous chart, also scored gains, except for the Philippines.

V. TRADE RELATIONS WITH THE UNITED STATES

Trade relations between the United States and ASEAN (including Singapore) are deepening. U.S. imports of ASEAN products increased by close to 200 percent during the 1977-1984 period. This compared to an increase in imports from all developing countries of less than 70 percent. The following table shows the growth of U.S. imports from individual ASEAN countries from 1977 to 1984:

TABLE 5. U.S. Imports from ASEAN
(millions of dollars)

	1977	1984
Indonesia	3,475	5,657
Malaysia	1,318	2,205
Philippines	1,110	2,622
Singapore	883	4,121
Thailand	346	1,426

Source: U.S. Commerce Department statistics. Brunei is not included since it did not join ASEAN until 1984.

The United States has become the key market for the manufactured products of these countries. Malaysia leads the way with over 70 percent of its exports to the United States as manufactured articles. Electronic components and parts provided the bulk of Malaysia's manufactured exports with $1.47 billion imported into the United States in 1984, according to Commerce Department figures.

The Philippines shows a similar pattern with 60 percent of U.S. imports from the Philippines in 1984 as manufactured goods. Electronic components and textiles and garments are the lead items.

The percentage for Indonesia is considerably lower because of the high volume of Indonesian oil sold to the United States and the lower level of manufactured exports overall. The United States, nevertheless, is the number one market for Indonesian manufactures. Textiles and garments, in particular, have emerged from $126 million in U.S. imports in 1980 to $261.3 million in 1984.

ASEAN also has emerged as a leading growth market for U.S. exports. The volume of U.S. exports to ASEAN countries is small compared to markets like the European Economic Community, Japan, the Latin American republics, Canada, and the Near East, but the rate of expansion over the last ten years has been considerably higher than for other markets. U.S. exports grew from $3.9 billion in 1977 to $8.4 billion in 1984.

Moreover, ASEAN has become a particular growth area for U.S. exports of technologically intensive products. U.S. statistics show that high technology items compose about 45 percent of all U.S. exports during the 1970s but that this category increased as a percentage of exports to ASEAN states from 46 percent in 1970 to over 70 percent by 1979. 22/

The following table shows the value of U.S. exports to ASEAN countries for 1977 and 1984 (in millions of U.S. dollars):

22/ Krause, Lawrence B. U.S. Economic Policy Toward the Association of Southeast Asian Nations. Washington, The Brookings Institution, 1982. p. 42-46.

TABLE 6. U.S. Exports to ASEAN
(millions of dollars)

	1977	1984
Indonesia	762	1,193
Malaysia	561	1,827
Philippines	876	1,709
Thailand	1,262	1,044

Source: U.S. Department of Commerce statistics.

According to U.S. trade figures, the United States is running trade deficits with each of the four countries. The deficit is highest with Indonesia because of U.S. imports of large amounts of Indonesian oil. Moreover, deficits rose considerably for the Philippines, Thailand, and Malaysia in 1984 when strong U.S. economic growth in that year produced a surge of imports from these countries. The following table shows the U.S. trade balance with the ASEAN countries and, for comparison, other East Asian countries for the years 1982-1984:

TABLE 7. U.S. Balance of Trade with East Asia
(millions of dollars)

	1982	1983	1984
Indonesia	-2,565	-4,211	-4,674
Malaysia	-248	-527	-998
Philippines	-121	-366	-913
Thailand	-94	-129	-382
Hong Kong	-3,433	-4,262	-5,837
Singapore	+896	+717	-490
South Korea	-677	-1,947	-4,188
Taiwan	-5,434	-7,709	-11,266

Source: U.S. Department of Commerce Statistics.

Trade between the four ASEAN countries and Japan in the 1980s so far shows a different pattern than trade with the United States. Except for Japanese imports from Malaysia, trade has declined or has grown very slowly, in contrast to the impressive growth in two way trade with the United States.

The following table shows the growth of Japanese imports from the four ASEAN countries from 1981 to 1985 (in millions of dollars):

TABLE 8. Japan's Imports from ASEAN
(millions of dollars)

	1981	1985
Indonesia	$13,305	$10,117
Malaysia	2,927	4,309
Philippines	1,731	1,242
Thailand	1,061	1,027

Source: Japan Tariff Association.

Japanese exports to the region decreased during the period. The following table shows Japanese exports to ASEAN countries in 1981 and 1985 (in millions of dollars):

TABLE 9. Japan's Exports to ASEAN
(millions of dollars)

	1981	1985
Indonesia	$4,123	$2,170
Malaysia	2,424	2,167
Philippines	1,928	952
Thailand	2,251	2,030

Source: Japan Tariff Association.

Second, Japan purchases very few manufactured goods from the four countries. A recent analysis of Japanese trade with the ASEAN countries, including Singapore and Brunei, showed that manufactured goods made up 6.4 percent of total exports to Japan versus 48.7 percent of total exports to the United States. 23/

VI. TRADE DISPUTES WITH THE UNITED STATES

As U.S. trade with the four ASEAN countries has grown, trade disputes also have emerged. The four ASEAN governments have voiced concern and criticism over growing protectionist sentiment in the United States, increased

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23/ Smith, Charles. Upset Equations Spark a New Look at Old Problems. Far Eastern Economic Review, June 12, 1986. p. 63.

restrictions imposed by the U.S. Government on their exports, and U.S. subsidies for exports of competitive products. The four governments have cited several product lines in this context:

(1) Tin: Malaysia, Indonesia, and Thailand have complained that the U.S. government's sale of tin under the U.S. Strategic and Critical Materials Stockpiling Act which authorizes the maintenance of the tin stockpile. The releases are authorized in annual defense authorization legislation.

(2) Sugar: U.S. quotas on imported sugar affect the Philippines and Thailand. The President is authorized to impose quotas by the Tariff Schedule of the United States. The quantitative basis for the quotas, however, lies in Title IX of the Agriculture and Food Act of 1981, which sets a requirement for price supports for sugar at specific levels in the domestic market. The decline in world sugar prices prompted the Reagan Administration to impose sugar quotas in 1982. The Philippines has 13.5 percent of the total quota; Thailand has 1.4 percent.

The quota had a harsh impact on Thai sugar exports to the United States, forcing a reduction from 282,000 metric tons in 1981 to 26,000 metric tons for the first quota period, May-December 1982. The U.S. quota has contributed to a decline of Thai sugar exports from nearly 10 percent of total exports in the 1980-82 period to about five percent currently.

The Food Security Act of 1985 directs the Secretary of Agriculture to lower sugar quotas if necessary in order to maintain a domestic price (currently 18 cents per pound) that is well above the world market level. In March 1986, the Agriculture Department used the authority to lengthen the present quota period from 10 to 13 months, in effect reducing the total sugar quota by 23 percent, applied to all countries under the quota. This redution came at a time when the new Philippine government of Corazon Aquino asked that the United States raise the quota for the Philippines as a measure of relief for the depressed sugar industry.

(3) Rice: The Food Security Act of 1985 establishes what Thailand and many other governments describe as subsidies for U.S. exports of rice through the Commodity Credit Corporation's loan programs. These have the effect of setting a price floor for the farmer. The Food Security Act alters the loan programs in the direction of lowering the floor, thus lowering the price the U.S. rice would sell for in the international market.

Thailand has raised the issue with the United States at the highest diplomatic levels. Thai government officials and rice traders believe that U.S. subsidized rice will cut into Thai overseas sales of rice (Thai rice exports are not subsidized). Thai estimates of lost sales due to the U.S. program range from $60 million annually to $200 million. 24/

(4) Textiles: The Thai, Indonesian, and Philippine governments have expressed opposition to legislation (the so-called Jenkins bill) passed in

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24/ Asian Wall Street Journal Weekly. April 28, 1986.

August 6, 1986. Under the bill, Indonesia, the Philippines, and Thailand would have been limited to future growth of one percent per year in each product category of textiles. Malaysia would be allowed generally six percent per year growth, but there would be lower rates for "import sensitive" categories. Most textile exports from Southeast Asia are in the "import sensitive" categories.

U.S. Concerns. The Reagan Administration has pressed these countries to reduce tariff and non-tariff barriers to products from the United States. It has requested that they ratify the Tokyo Round of multilateral trade negotiations under the GATT, which sets up a mechanism for agreements on tariff cuts and elimination of a wide range of non-tariff barriers. The United States has urged ASEAN governments to sign codes of conduct drawn up under the Tokyo Round. Those codes regulate government practices on import licenses, export subsidies, procurement standards, customs valuation, and dumping. The Reagan Administration also has pressed the Philippine and Indonesian government to allow United States banks and insurance companies greater access into their markets for services. Most recently, the administration has pressured Thailand and Indonesia on better protection of the intellectual property rights of United States firms. Both countries have gained a reputation as centers for the production of counterfeit products under United States labels, especially electronic products like video cassettes.

VII. FUTURE ECONOMIC PROSPECTS

For the last 20 years, the economies of Indonesia, Malaysia, Thailand, and the Philippines have retained much of the heritage of dependence on exports of agricultural commodities and natural resources to the Western industrial countries. In varying degrees, they have been successful in diversifying their export product mix to include new commodities and resources, more processed goods, and manufactures. With the Philippines as an exception, this strategy has produced high economic growth and rising living standards for major segments of these nations' populations.

Dependence on the Western industrial countries has produced problems, however, which cloud future prospects: First, world prices for agricultural commodities and natural resources are determined in large part by the levels of demand in the West; recent history has shown wide fluctuations in these prices and a downward spiral since 1979. Second, restrictive policies in the United States, Japan, and Western Europe have limited the exports of certain commodities and, increasingly, manufactured goods. Finally, the debt problem is related in part to the role of the IMF and to the policies of the Western countries affecting interest rates and the position of the U.S. dollar in relation to other currencies.

The outlook for Indonesia, Malaysia, the Philippines, and Thailand is mixed even if generally optimal world economic conditions prevail over the next five years. Philippine recovery is likely to be slow at best, given the magnitude of its problems. Indonesia remains too dependent on oil, and it would be able to take only limited advantage of good opportunities in the world economy. Malaysia and Thailand, however would

have good prospects under the right conditions. Their economies have achieved enough diversification so that there are several sectors with strong growth potential.

What are the optimal conditions? The first is political stability. The relationship between political stability and economic performance in these countries is not a simple cause and effect relationship. Each can affect the other in either a positive or negative fashion. In the Philippines, for example, economic decline after 1979 fed growing discontent with the Marcos government. The Aquino assassination in August 1983 produced political instability which, in turn, sparked capital flight and a loss of investor confidence. Since then, political turmoil, growing communist insurgency, and economic decline have fed upon each other, producing a downward spiral in overall internal conditions.

A second optimal condition would be access to foreign capital without aggravating these countries' foreign debt situation. The keys to such access would be increased foreign private investment in these countries, significant economic aid on concessional or grant terms, especially in the case of the Philippines, and a level of interest rates for international borrowers that does not rise and, preferably, would decline further.

Access to major export markets is a third condition. This would involve a reduction of import restrictions by Japan and the Western European countries and at least the maintenance by the United States of the current level of access to the U.S. market. It also would involve strong growth of the Western and Japanese economies and resultant demand expansion.

A growth in demand in the West and Japan also would spur a rise in the long-depressed prices of commodities and natural resources. A similar impact could occur with regard to oil prices. A boost in price levels for these products would have a stimulative effect on the economies of each of the four countries.

The domestic demand of the individual economies long has been a weakness for each of the countries. At times of international recession and falling world prices, domestic demand has been too weak to cushion the impact. This is especially the case today for the Philippines and Indonesia but only slightly less so for Thailand and Malaysia.

The growth of a consumer base in South Korea and Taiwan helped these countries through the 1979-1982 international recession with continued respectable economic growth of four percent per annum or better. Consumer purchasing power was built through a combination of expansion of the agriculture sector, especially in terms of food production; the development of labor intensive industries that exported most of their output; and a broad distribution of income within the agricultural and industrial work forces.

Nevertheless, even in South Korea and Taiwan, domestic purchasing power serves only as a temporary cushion to the effects of a depressed market in the Western countries and Japan. Thus, any alternative strategy of relying on agriculture and the domestic market for economic growth would likely produce only limited results for Indonesia, Malaysia, the Philippines,

and Thailand. Growth would be possible but at much lower rates than these countries have achieved since 1970. The same could be said of the economic impact if ASEAN formed a common market. Business opportunities certainly would be enlarged in an expanded Southeast Asian market but not to the extent that would compensate for a major cutback in sales to the West and Japan. Finally, it is doubtful that the Philippines will make an economic recovery in the near term unless the export sector contributes substantially.

CHAPTER 5

PRC MODERNIZATION AND OPENNESS: A NEW LDC AND SOCIALIST MODEL FOR THE PACIFIC*

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* Prepared by John P. Hardt, Associate Director for Senior Specialists and Jean F. Boone, Senior Research Assistant, Office of Senior Specialists, Congressional Research Service.

I. IMPORTANCE OF PRC MODERNIZATION

Since the death of Mao in 1976, the People's Republic of China has undertaken an ambitious program of modernization. Already, the country has made significant strides in the development of its economic potential but continued progress toward its objectives will require the resolution of a variety of problems in the economic, political, and social spheres. The extent to which China's modernization is carried through and is successful will have an important impact on the country itself, the Asian region, and the world, an impact that may be felt through the following four roles that China could fulfill:

As a Potential Asian and World Economic Power

With human resources comprising one-fifth of the world's population, and a strong energy and material resource base, China possesses formidable potential. With some success in modernization and economic growth, this populous, well endowed country may begin to return to its "Middle Kingdom" status as an economic power, not only in Asia but in the world, fulfilling the traditional (and continuing) Chinese view that China is the center of all culture, power and development in the world.

As a Participant in the Pacific and World Market

With only modest success in modernization and openness, the PRC could become a significant factor in the changing Asian and world market. With substantial success, the PRC could join Japan and the United States as the third major force in the Asian market.

As a Model for Developing Countries

Despite a burden of population unmatched by most other nations in the world, the PRC has been able to develop a growth formula that has taken it out of the shadow of Malthus and put it on the track of dynamic growth; a formula that includes positive control of population and industrialization without urbanization. These characteristics and, in particular, China's ability to feed its own population, are accomplishments that many developing countries could hope to imitate, albeit without the social costs of the "one child" family policy.

As a Model for Socialist Economies

In the context of central Party governance, central planning, and socialist ownership and economic rights, China has moved toward market-simulating efficiency and world quality of output, providing a potentially useful example for other socialist countries. Indeed, all countries that possess a Marxist-Leninist ideology, a centrally planned economy and a centrally controlled system of governance are affected by changes in the PRC. The other Communist giant, the Soviet Union, may be especially influenced as its leaders

react to the development of "socialism with Chinese characteristics." Reflecting Soviet interest in Chinese developments, a leading Soviet political observer recently noted, "The economic reforms affecting the management system, the production relations, and each worker in this country with its billion-strong population, are a complex, multifaceted, and highly contradictory process. Time is needed to fully evaluate the results..." 1/ But the Soviet leadership will be watching the process carefully.

Clearly, in each of these four contexts, China could play a significant role. But since China's prospective role in the region and the world may be largely defined by its success in modernization, it is necessary to consider the context in which change is occurring and the various paths China's development might take in proceeding through the rest of the century.

II. THE CONTEXT OF CHANGE IN CHINA: THREE SCENARIOS TO THE YEAR 2000

The economic experience during the Maoist and Deng periods of governance has been more cyclical than stable, alternating between differing sets of central policy objectives. The official modernization program implies a stable trend toward the Year 2000, but the historical record would suggest continuing variations in performance. 2/

Under Deng Xiaoping, China has set forth on a course of ambitious modernization of the economy. In the initial stages, especially in the late 1970s when readjustment and retrenchment were required, the program of modernization and its targets for the end of the century seemed neither credible nor attainable:

- o Quadrupling gross value of industrial and agricultural output.
- o Tripling personal income.
- o Doubling energy output; quadrupling electric power.

1/ Burlatsky Fedor. Conversations on Economic Reform in China. Literaturnaya Gazeta. June 11, 1986. p. 14. Translated in FBIS Daily Report, USSR International Affairs, June 18, 1986, p. B1-9.

2/ The following discussion draws on the papers in the recent publication of the Joint Economic Committee of the U.S. Congress, China's Economy Looks to the Year 2000: Volume 1, The Four Modernizations, and Volume 2, Economic Openness in Modernizing China, Committee Print, 99th Congress, 2nd Session. Washington, U.S. Government Printing Office, May 21, 1986. [Hereafter referred to by short title, China's Economy I and II.]

However, with rural reform initiated in 1979, urban reform announced in 1984, and the 1985 science and technology reforms to more closely link research with economic requirements, the Chinese are now following a consistent pattern of improved performance--a trend line that could bring them close to the overall targets, which so recently seemed unattainable, by the year 2000. To be sure, a part of this early success represents recovery from the economically disasterous Cultural Revolution under Mao and his radical followers (the "gang of four") and improvements in the abnormally low productivity of China's overcentralized Soviet-style economic system. Still, by introducing extensive and wide-ranging reforms, the Chinese appear to be developing a new form of socialism--a unique mixture of central planning and market forces, referred to as "a socialist system with Chinese characteristics." If successful, these programs for economic development would bring China into the club of major powers, in one of the most rapid economic transitions since the British initiated the industrialization process in the eighteenth century.

One could project any number of possible scenarios for China's economic development but, in this discussion, three distinct paths will be considered--(1) Return to Maoist Political Cycles, (2) Stable Growth Along the Official Dengist Trend Line to the Year 2000, and (3) a Pattern of Variations Around A Trend--the Empirical Record of Restructuring and Reform under Deng. The choice of these scenarios reflects the authors' perception that while Deng's approach to modernization to the year 2000 and the process of economic restructuring and reform represent a potentially new model for China, a return to the pattern of the Maoist period that preceded Deng's introduction of the modernization strategy should not be ruled out.

There are, however, various points of view on other putative scenarios deriving from disagreements on how the pre-Deng period should be characterized and how the future prospects for China's economy should be defined. According to the Soviet commentator, Burlatsky, the Chinese recognize the existence of the five socialist economic models that might be considered frames of reference: the Soviet period of war communism; the Soviet economic system of the 1930s; the current Soviet approach; the Hungarian approach; and the Yugoslav model. 3/ In the Chinese analysis, Deng's reforms are characteristically referred to as a change from the Soviet model; many Western observers such as Robert Dernberger also characterize the pre-Deng period as one of adherence to the Soviet model. 4/ Nevertheless, it can be argued that the Chinese experience, while perhaps somewhat Stalinist in form, was not Stalinist in substance. Therefore, the period preceding 1976 could be referred to as a

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3/ Burlatsky, Conversations, p. B-8.

4/ Dernberger, Robert F. Economic Policy and Performance. In China's Economy I. p. 15-48.

Maoist period--reflecting a distinctly Chinese approach to development. 5/ Given the latter interpretation of the past, one cannot preclude a scenario of return to the general dominance of political-ideological factors over economic growth and efficiency.

A Return to Maoist Political Cycles. There have been times such as the Great Leap Forward and the Cultural Revolution periods when the requirement for ideological revitalization conflicted with policies for economic performance. If this experience is repeated periodically, stable long-term growth prospects would be in jeopardy. To assume that there will be no recurrence of these economically disturbing political-ideological cycles would, on the one hand, give very great weight to the unique force of Mao's personality and, on the other hand, deemphasize the broader base of support in the Party and nation as a whole for the "Yenan" revolutionary spirit, support which Mao must have had.

Thus, a return to Maoist political cycles must be considered one possible path for China's future development. Still, as time goes on, the cost of a return to Maoist strategy and tactics becomes greater in political and economic terms:

- o Return to the commune and egalitarianism in agriculture.
- o Return to more centralization, mandatory planning in industry and extensive development of the economy;
- o Return to ideological-political training for political and economic cadres, deemphasizing technical education.
- o Deemphasis on acquiring Western technical and managerial expertise.
- o Return to mass army, guerrilla strategy for military formations and political-ideological strategy abroad.
- o Return to autarky in foreign commerce and self reliance.

The following table (Table 1, page 5) illustrates the cycles of economic development experienced by the PRC under Mao and in the first five years following his death. As indicated by the figures, economic growth occurred in the periods of rehabilitation and the first five-year plan, but implementation of the economic policies of the Great Leap Forward led to drastic reversals, with GNP in 1961 dropping to the levels of 1953-54. The economy began to recover and move forward again during the period of readjustment and recovery; however, during the Cultural Revolution of the late 1960s political and ideological objectives superseded economic goals, as reflected in the relevant declining production figures, especially during 1967 and 1968. Since 1970, the indicators show generally steady improvement and growth in China's economy.

5/ For a more detailed discussion of China's development in comparison with the U.S.S.R., see Hardt, John P. Economic Reform in the PRC, Soviet Union and East Europe: Comparative Themes Toward the Year 2000. Presented at the Fifteenth Sino-American Conference on Mainland China, Taipei, June 1986.

TABLE 1.—CHINA: MAJOR ECONOMIC INDICATORS, 1949–80 [REV. AUG. 14, 1981] 6/

Period	GNP (billions of 1980 dollars)	Population midyear (millions)	Population increase (percent)	GNP per capita (1980 dollars)	Agricultural production (1957=100)	Grain output (millions of metric tons)	Grain output per capita (kilograms)	Industrial production (1957=100)	Steel output (millions of metric tons)	Coal output (millions of metric tons)	Oil output (millions of barrels per day)	Percent trade with Communist countries
1949–52: Rehabilitation:												
1949	71	538	----------	131	53	111	205	20	0.16	32.4	0.002	Negligible
1950	86	547	1.77	158	64	130	235	27	.61	42.9	.004	29
1951	100	558	1.95	179	72	141	250	38	.90	53.1	.006	51
1952	118	570	2.11	206	84	161	280	48	1.35	66.5	.009	70
1953–57: 1st 5-yr plan:												
1953	123	583	2.23	211	84	164	278	61	1.77	69.7	.012	68
1954	127	597	2.42	213	84	166	275	70	2.22	83.7	.016	74
1955	140	612	2.50	229	94	180	291	73	2.85	98.3	.019	74
1956	150	626	2.40	240	97	188	297	88	4.46	110.4	.023	66
1957	159	642	2.46	248	100	191	294	100	5.35	130.7	.029	64
1958–60: Great leap forward:												
1958	180	658	2.46	274	103	196	295	142	11.08	230.0	.045	63
1959	170	672	2.25	253	83	171	252	173	13.86	300.0	.074	69
1960	156	682	1.38	228	67	141	206	181	18.66	280.0	.10	66
1961–65: Readjustment and recovery:												
1961	125	682	.01	183	69	146	215	105	8	170.0	.11	56
1962	140	682	.00	205	79	163	238	111	8	(1)	.12	53
1963	158	692	1.53	228	86	175	250	134	8	(1)	.13	45
1964	182	712	2.93	256	98	194	268	161	9.6	214.0	.18	34
1965	203	736	3.33	276	101	194	260	199	12.2	232.2	.23	30
1966–70: 3d 5-yr plan:												
1966	232	759	3.04	306	114	220	286	232	15	271.4	.29	26
1967	226	780	2.86	290	120	230	291	202	10	190.0	.28	21
1968	228	802	2.79	285	115	221	272	221	9	235.8	.30	22
1969	252	825	2.87	305	119	230	275	266	16	281.6	.43	20
1970	282	848	2.82	333	126	243	283	316	17.8	327.4	.60	20
1971–75: 4th 5-yr plan:												
1971	301	871	2.64	345	130	246	279	349	21	353.6	.77	23
1972	312	892	2.40	350	126	240	266	385	23	376.5	.90	21
1973	351	912	2.23	385	141	265	288	436	25	398.1	1.14	17
1974	364	931	2.14	391	146	275	292	455	21	403.0	1.36	17
1975	388	950	2.01	408	148	284	296	502	24	478.0	1.54	16
1976–80: 5th 5-yr plan:												
1976	395	967	1.79	408	152	286	293	508	20.5	483.0	1.74	18
1977	429	982	1.60	437	155	283	286	581	23.7	550.0	1.87	16
1978	479	997	1.53	480	169	305	303	659	31.8	618.0	2.08	14
1979	520	1,012	1.50	513	183	332	326	716	34.5	635.0	2.12	12
1980	552	1,027	1.46	538	188	320	309	778	37.1	620.0	2.12	12

1 Not available.

6/ Ashbrook, Arthur. China: Economic Modernization and Long-Term Performance. In U.S. Congress. Joint Economic Committee. China Under the Four Modernizations, Part I. Washington, U.S. Govt. Print. Off., August 13, 1982.

Stable Growth Along the Official Dengist Trend Line to the Year 2000. In contrast to a return of Maoist cycles, a second scenario could project a stable trend of development to the year 2000, as anticipated in Deng's modernization program. Such a steady, irreversible improvement in performance has been the only scenario entertained publicly by the Chinese. Given their exclusive focus on this path of growth, it should be included here as one possible outcome for China's economy over the rest of the century. Indeed, some of the past achievements of the Chinese in economic development may suggest that such an optimistic trend would not be impossible to accomplish.

Even prior to Deng's modernizations, some of the industrial accomplishments of Mao's China were impressive. Industrial growth, although variable, has been significant since the Communists took power in 1949. Effective restructuring and reform in rural China may be carried over to the urban economy. Already significant deregulation of the centrally controlled sectors and widespread introduction of incentive systems has brought about some promise of improved economic performance and this trend may continue.

- Decentralization may substitute local for central control; self-initiative for directed management; profit-seeking innovation and retention of profits from the market for material balance planning.

- Prices may become flexible and responsive to relative scarcity.

- The traditional zero price attached to investment--a major departure from scarcity pricing--may give way to interest bearing loans to promote new projects and user taxes to reflect the scarcity value of existing resources.

In addition to these measures, a shift from extensive to intensive development in China--coincident with economic reform and restructuring of the economy--would be necessary to ensure a steady continuation of the growth trend. Reform of the Chinese economy has been viewed as necessary to overcome avoidable waste, central planning inconsistencies, and excessive regulation that has impeded cost reduction and mobility, and lack of planning coordination that has led to significant cost increases. Furthermore, intensification would address the problems of the Maoist past in which there was little incentive to value costs accurately and to increase quality; innovation was absent from the Chinese economy except for specific priority sectors.

These are ambitious requirements to meet and there are those who feel that market simulating improvement in efficiency is impossible for a centrally planned economy without the abandonment of central control and adoption of a fully pluralistic market system. In contrast, others would argue that halfway reform measures could lead to "retrogression toward some form of modernized Stalinist administrative command" system. 6/

6/ See Prybyla, Jan S. Mainland China and Hungary: To Market, To Market. . . . and Cheng, Chung-Yuan. Economic Reform in Mainland China: Consequences and Prospects. Presented at the Fifteenth Sino-American Conference on Mainland China, Taipei, June 1986.

Dengist Variations around a Trend: Continuation of Incremental Remedial Restructuring and Reform Under Deng. The third, and perhaps most likely, scenario reflects the empirical record of variations around a trend in which progress toward growth and modernization has been both muted by setbacks and adjustments and stimulated by above plan performance, but not reversed. Although the PRC's post-Mao economic success has been notable to date, it would be even more remarkable if the growth continued on a straight line, unabated to the year 2000. These official Chinese projections are the basis of World Bank projections to the year 2000. More likely seems to be a range of outcomes around the official projections. Professor Lawrence Lau, with a more conservative view on agricultural performance and Albert Keidel, et al. at Rock Creek Research, provide such a range of aggregate and sectoral projections (Table 2, below).

TABLE 2. Comparison of Real GDP Growth Projections, 1981-2000

	Agri-culture	Indus-try	Other	Total
World Bank Quadruple	4.9	7.1	7.6	6.6
L. Lau High Scenario	3.4	7.9	6.7	6.7
Rock Creek Research Low	5.7	7.7	9.3	7.8
Rock Creek Research High	5.7	9.3	9.8	8.7

Sources: World Bank, China, Long-Term Prospects, 1985, L. Lau, A Model of the Chinese Economy, unpublished, 1985. Albert Keidel, Robert Bruce, Nicole Carter, Rosemary Draper. The Role of Technology Transfer for China's Economic Future, prepared for the Office of Technology Assessment, United States Congress, May 1986, Rock Creek Research, Inc. p. 2.

In considering what may occur in the future, it is necessary to consider both the positive and negative aspects of China's past and its likely future experience. While the Chinese are reluctant to acknowledge the continuing need for unplanned and unpredictable adjustments and restructuring, bottlenecks in certain key sectors and a variety of potential problems, including possible conflict between the imperatives of economic reform and the imperatives of the Marxist political system (to be discussed below) are likely to cause variations in performance and deviation from the steady trend. These variations from the planned trend line may lead to performance not only below the projected levels but at times, above the projected levels. For example, recent growth has been deemed too rapid as it generated inflationary and balance-of-payments problems. This has, in fact, been the pattern of change and development under Deng to date; the third scenario would thus appear the most likely as we reflect on this history of variability in performance and results.

Of course, a fourth possibility must be acknowledged--that continued reforms do not bring about any improvement in performance and that China's growth simply retards, without reversal to the political swings of Maoism. However, in looking at the dynamics of Chinese growth and development to date under Deng's modernization programs, there appears to be both the momentum and potential for continued economic growth in the future, albeit with occasional setbacks and readjustments.

Many Western specialists on the Chinese economy accept the likelihood of substantial growth to the year 2000. The range of estimates between Keidel (more rapid growth) and Lau (somewhat slower growth) appears to embrace most of the Western estimates. It is our view, as reflected in scenario three, that although continued growth is likely to occur, steady growth is as unlikely in the future as in the Dengist past. The ability of the leadership and economic decision makers to overcome bottlenecks, identify and effectively react to constraints on performance, and take the necessary steps to adjust, consolidate, improve and reform will determine the level and quality of performance. These policy adjustments may be in some cases predictable, as are policy or economic cycles elsewhere. For this reason, economic indicators might be designed for providing evidence of emerging problems in areas that are likely to constrain growth. These explicit indicators of progress and setbacks would be helpful for Chinese leaders and Western observers alike, since the Chinese ability to recognize and deal with these "growing pains" of development and its willingness to address the potentially far-reaching political and ideological implications of reform will determine both the level of China's future performance and the character of fluctuations in performance. This pattern of variations in performance is the focus of our discussion of "Deng's Record to Date" which follows.

III. PRAGMATIC RESTRUCTURING AND REFORM: DENG'S RECORD TO DATE

If scenario three is the most likely path for China's future economic development, one can find in the record of Deng's reforms to date the underlying factors of growth that will create variations both above and below the leadership's projected trend. In each of the four modernizations and the opening of the economy, the areas of success and obstacles to full implementation of reform can be seen.

A. Rural Reform and Agricultural Modernization

1. Population Prospects: Consumption and Employment

China's "One Child Policy" and its recent population trends raise the prospect of a reduced population growth rate, one that could be sustained

both by increasing labor force utilization and expanding consumption, i.e., full employment and rising real income. 7/

The most populous country in the world--its one billion people represent more than one-fifth of the world's population--China has shifted its population policy in the last decade from the Maoist view that more people are an asset to a belief that unrestricted growth of its population would be a severe economic burden. General health indicators have been comparable to those of many more economically advanced economies, showing increased life expectancy, reduced infant mortality, and decline of infections and specific diseases. With a turn to population control during the last decade, and through a variety of incentives and often stiff penalties, Chinese authorities managed to lower birth rates from over 30 per 1,000 in 1971, to 18 per 1,000 in 1979 [from 2.3 to 1.2 percent natural growth per annum]--an astonishing reduction in natural increase. To maintain these levels of fertility despite a significant increase in the number of young people in the reproductive ages--and as part of a long-term demographic strategy to achieve a stable population of 1.2 to 1.4 billion--China has been pressuring couples to have just one child.

Even with a lower rate of population growth, there will still be the need to create some half billion new jobs by the early 21st century in order to maintain an acceptable unemployment rate of 5 percent or less. The traditional right to work has been challenged by this acknowledged unemployment rate. Taking into consideration both concealed unemployment and underemployment, urban unemployment may be as high as 10-15 percent, or several times the official rate. China's industrial labor force may now be larger than the total industrial labor force of all developing economies combined. Once unevenly industrialized with major assets concentrated in Manchuria and the coastal areas, China is now in the process of dispersing industry and transport throughout the country, contributing to the development of a national economy.

7/ See articles by Lardy, Nicholas R. Overview: Agricultural Reform and Rural Economy; Crook, Frederick W. The Reform of the Commune System and the Rise of the Township-Collective-Household System; Orleans, Leo A. Overview: China's Human Resources; Aird, John S. Coercion in Family Planning: Causes, Methods, and Consequences. Taylor, Jeffrey R. Labor Force Developments in the People's Republic of China, 1952-83; Banister, Judith. Implications of China's 1982 Census Results; Eberstadt, Nick. Material Poverty in the People's Republic of China in International Perspective; Surls, Frederic M. China's Agriculture in the Eighties; Travers, Lee. Peasant Non-Agricultural Production in the People's Republic of China; Lampton, David M. Water Politics and Economic Change in China; Sicular, Terry. Recent Agricultural Price Policies and Their Effects: The Case of Shandong; Hanson, Jaydee R. Chinese Fisheries; Stone, Bruce. Chinese Fertilizer Application in the 1980s and 1990s: Issues of Growth, Balance, Allocation, Efficiency, and Response. In China's Economy, I.

In the final analysis, the level of China's unemployment and underemployment will depend on the management of the countryside. The goal is to increase non-agricultural activities in the rural areas, develop small and medium-sized towns, limit the proportion of laborers involved in crop cultivation, and, of course, increase productivity.

Although Maoist economic policy did not again intervene massively in the rural economy after the end of the Great Leap Forward period of forced commune development (1958-60), agricultural performance did not increase markedly before the introduction of rural reform. In 1978 China was still dependent on imports to feed its population despite technological advancements in seeds, fertilizer, and water use. Moreover, roughly 40 percent of the urban population in 1978 depended on imported cereals and even a larger proportion was dependent on non-grain imports; in fact, China was one of the world's largest importers of edible vegetable oils and raw cotton. In addition, rural income increased only very modestly in the two decades from 1956 to 1978 as modern inputs into agriculture were offset by the adverse effects of the rising man-land ratio. Systemic inefficiencies generated by the emphasis on local self-sufficiency, and the curtailment of rural marketing that precluded efficient matching of agricultural supply and urban demand contributed most to the retardation of effective rural growth.

The most notable achievements of Deng's modernizations to date have followed the introduction of rural reform in 1978 when the 800 million people in the countryside, previously organized in egalitarian communes, began a shift to a family responsibility system. 8/ Not only did output in grain and basic necessities, such as cotton fiber, increase, but rural industry burgeoned, representing now 10 percent of total industrial output and employing 20 percent of the rural labor force. The successful expansion of food production and the implementation of population control programs have permitted the world's largest nation to escape the specter of Malthus and become an exporter of foods. Personal income and rural output increases during the rural reform period have been impressive:

- Peasant income has doubled in less than a decade; per capita farm income rose from 134 to 310 Yuan during the years 1978-1983. Increased rural income resulted in a sharp rise in peasant consumption and private housing construction. The sharply differentiated incentive system has changed not only land tenure but the social structure of rural China.

- From 1978-84, grain production grew 4.9 percent as compared to only 2.1 from 1957-78.

- Output of other crops grew still more rapidly as China became a net exporter of coarse grains, soybeans and raw cotton.

8/ Communique of the Third Plenary Session of the 11th Central Committee of the Communist Party of China, adopted on December 23, 1978. Translated in FBIS Daily Report, PRC National Affairs, December 26, 1978, p. E4-13.

These increases were accomplished without a significant burden on centrally planned investment. While state investment in agriculture decreased, the use of rural credit went up. Moreover, increased output was produced on reduced acreage in cultivated farmland through more efficient use of existing resources--in part a result of increased incentives inherent in the family responsibility system. The national self-sufficiency of China, indeed the development of an agricultural export capability, is a major accomplishment; it is of global importance that the PRC, with one-fifth of the world's population, is no longer a burden on world food resources.

While by key per capita income measures China still ranks near the bottom among developing countries, viewed in the historical perspective Chinese human resources are being well used and served in their development process. As the Chinese economy has grown, so have Chinese consumers' expectations--from the income level typical of a developing country where workers and peasants alike worked to buy bicycles, watches, sewing machines and radios, to the current expectation of successful peasants and workers for consumer durable goods, such as motorcycles, refrigerators, and television sets. China's successes in rural development were highlighted by the Soviet political commentator Fedor Burlatsky as follows:

> First and foremost--transition to contractual responsibility. Contracts within the framework of the family, cooperative, rural industrial enterprise, or trade association. Second--orientation toward diversified agricultural production, and also expansion of stock raising, vegetable growing, and industrial crops. Third--fast growth of small and medium industrial production in the countryside.
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> And finally--and this process is only just beginning--utilization of modern scientific achievements, particularly in the sphere of horticulture and fertilizers. 9/

2. Trends and Problems: Inadequate Infrastructure to Support Growth and Insufficient Consumer Goods to Absorb Purchasing Power

The implementation of wider local autonomy in the agricultural and rural economy may be sufficient to sustain growth if the rural infrastructure, including transport, does not become a major constraint. The rural reform may be divided into two steps: (1) initial family responsibility, local production stage, with incentives from a split market; (2) secondary infrastructure building, expansion of consumption, and income differentiation stage. In this secondary stage, perhaps in the

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9/ Burlatsky, Conversations, p. B2-3.

1990s, bottlenecks may arise with diminished returns to inputs, slowing real growth.

- Long-term increases in agricultural output and productivity, albeit difficult, may be sustained through continued incentive effects of decollectivizing land holdings; increased specialization and marketization; continued stimulation from increases in key modern inputs--e.g., mineral fertilizer. However, each of these important sources of past growth in productivity may have diminishing effects in the future.

- Success in rural production will make more important the necessary improvement in the underdeveloped rural infrastructure and marketing systems. Incentives to facilitate marketing are urgently needed--development of rural infrastructure, inland waterways, water supply, power generation, rural road network, storage, refrigeration, and food processing may all be significant for continued improvement in productivity.

- Effectively joining increased supplies in rich rural provinces with demand in urban and other less productive provincial areas will be a challenging, complex process of transport development.

There are at least two schools of thought on continued potential in the Chinese rural economy: One school argues that improvements in the future must come from outside the rural economy; i.e., rural gains have been largely exhausted; now increased state investment is needed to improve transport marketing networks and other ties to the national economy. The other view suggests that improvements in performance are still possible inside the rural economy and financing may come from reinvestment by rural collectives and peasant households. Accurate components probably exist in both analyses.

B. Urban Reform and Industrial Modernization 10/

Urban reform and industrial modernization may require both effective decentralization and selective centralization, an apparent contradiction that will have to be resolved for success in the long-term.

10/ See articles by Barnett, A. Doak. China's Modernization: Development and Reform in the 1980s; Dernberger, Robert F. Economic Policy and Performance; Carver, Dean. China's Experiment with Fiscal and Monetary Policy; Halpern, Nina. Making Economic Policy: The Influence of Economists; Rawski, Thomas G. Overview: Industry and Transport; Field, Robert Michael. China: The Changing Structure of Industry; Naughton, Barry. Finance and Planning Reforms in Industry; Fischer, William A. Chinese Industrial Management: Outlook for the Eighties; Wong, Christine P.W. Ownership and Control in Chinese Industry: The Maoist Legacy and Prospects for the 1980s; Walder, Andrew G. The Informal Dimension of Enterprise Financial Reforms; in China's Economy, I. See also Fingar, Thomas. Overview: Energy in China; Brown, William B. China: Energy and Economic Growth; Keidel, Albert. China's Coal Industry; Suttmeier, Richard P. China's Nuclear Power Option; Lewek, Jim. China's Electric Power Industry; and Bosco, Don M. China's Hydropower Development. In China's Economy, II.

1. Guidance Planning and Profitability 11/

The process of change from central, mandatory planning toward local autonomy and financial-monetary planning may proceed through stages of delegation of responsibility and independence using analogues and surrogates of market measures.

- o Urban reform with its shift from mandatory to guidance planning is more complex than rural reform; the key to effective decentralization is a good profitability measure: one based on prices and costs which reflect relative scarcity and on interest rates and taxes which respond to market forces.

- o Shift of decision-making power from the center to enterprises and from the planning bureaucracy to professional managers may be politically easier now while Deng has broad-based support for reform, but, without the concomitant development of rational prices, interest rates and other monetary measures necessary to determine profitability, it will be difficult to evaluate success under guidance planning.

The balance between central planning and local autonomy in urban reform to date has been described by the Chinese:

> The most important commodities which are in short supply, like steel, copper, and cement, will be distributed by the state like before, even though a certain proportion of them is already available on the market. For example, we distribute centrally 80 percent of steel, but only 20 percent of cement. The ultimate aim is that all materials, including the ones in short supply (with the exception, of course, of the military industry sphere), will be distributed via the market....
>
> The reform now affects basically the medium and small enterprises, which are introducing a system of responsibility in various forms. Furthermore, extensive rights have been given to provinces, districts, and cities. And probably the most important aspect is the fact that we have embarked on the transition from deductions from profits to tax collection. The tax at present is equal to approximately 50 percent of net profits. This means that the remainder of the profit stays with

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11/ See the Decision of the 3rd Plenum of the 12th Party Central Committee adopted October 20, 1984. Translated in FBIS Daily Report, PRC National Affairs, October 22, 1984, p. K1-20.

the enterprises which use it for technical reconstruction, wage increases, the building of housing and of children's and cultural institutions, and also as a bonus fund. 12/

2. Central Planning for Energy and Transportation

While decentralization reforms could bring positive results in agriculture and industry, lack of full central control may be a disadvantage in developing and implementing comprehensive energy and transport programs.

China has experienced energy shortages, though these shortfalls have not been for lack of natural resources. Richly endowed in oil, gas, coal and hydro, China has the resource capability to provide for its own needs and become a major exporter of energy. Development of nuclear electric power potential may help resolve China's regional electric power supply and demand inequities; but energy output and supply have fallen far short of the needs and potential, making energy the pervasive bottleneck for meeting macro- and micro-economic goals.

Early post-Mao optimism on energy sufficiency gave way to a policy of readjustment, reform, consolidation, and improvement [the eight character policy], designed to alleviate energy deficiencies. To meet the leadership's target of quadrupling the gross value of industrial and agricultural output by the year 2000, a doubling of total energy and a four-fold increase in electric power production will be required. Continued central planning and control may be needed to provide the necessary investment for expansion of programs in energy and transportation:

- Continued centralized, mandatory planning in critical sectors such as energy, transportation, and defense, may restrict development of guidance planning. Incremental changes may be effectively made, but the assurance of success through partial reform is currently lacking.

- Central planning appears to be imperative in comprehensive development of hydrocarbons, hydro and nuclear power and transmission networks; local investment increases may be largely adequate to develop coal mining supplies.

- Key energy projects may be given special priority and access in order to assure adequate supplies of foreign exchange and imported technology. Foreign funds are especially important for long-term, large scale oil and hydro programs.

12/ Burlatsky, Conversations, p. B6.

- Overall comprehensive plans for coordinated development of hydro, thermal and nuclear capacity are needed but not yet developed to meet ambitious electric power goals. Investment debates pitting transmission against fuel transport requirements are likely, especially in decisions on coal and hydro programs (e.g., whether generating capacity should be located at energy source or demand center). Advocates of nuclear power tend to argue for locating of nuclear power stations at the demand or load center. Supply of nuclear reactors, especially from the United States, will have to comply with nuclear non-proliferation agreements.

- Petroleum prospects may be constrained by lack of success in attracting foreign investment for expansion of offshore and interior-based oil production; by inadequate advanced technology to improve recovery rates at old wells; and by inadequate modern equipment to improve efficiency throughout reservoir exploitation.

- Energy conservation and restructuring of energy balance is likely to be necessary, with particular focus on reducing oil consumption. Shift in priority from heavy to light industry is currently helpful in reducing energy needs but is not a long term solution.

C. Science and Technology Reform and Modernization 13/

Science and technology is to play a key role in modernization; the new industrial electronic revolution of the Western and Japanese industrial economies will both enhance China's modernization and increase the severity of competitive challenge. Therefore, it is deemed necessary (though not sufficient) to plan for the transition from extensive to intensive growth. The reform of science and technology may be formally associated with a March 1985 decree in which the need for a "technology policy" was announced in order to provide a more effective organization for scientific and research development, better use of foreign technology and improved cadres. 14/

1. Organizational Changes Necessary but Not Sufficient

The restructuring and reform of the scientific and research community is necessary but may not be sufficient to create the dynamic environment needed by the year 2000. The following changes will need attention:

13/ See articles by Suttmeier, Richard P. Overview: Science and Technology under Reform; Rehn, Detlef. China's Computer Industry at the Turning Point; Battat, Joseph Y. Transfer of Computer and Data Processing Technologies: First-Hand Experiences of a Foreign Consultant; Simon, Denis Fred. The Evolving Role of Technology Transfer in China's Modernization; and Lubman, Stanley B. Technology Transfer in China: Policies, Practice and Law. In China's Economy, II.

14/ Decision on the Reform of the Science and Technology Management System, Central Committee of the Communist Party, March 13, 1985. Translated in Beijing Review, No. 14 (April 8, 1985), p. 19-21.

- Early benefits of the closer marriage of research and production should be continued and expanded; otherwise, scientific and technological reform may be of short duration and limited impact.

- New incentive systems will need to be continuously supported with greater effort and sacrifice to keep up the momentum toward a dynamic and innovative scientific and technological environment.

- The disconnection between research and production is to be overcome.

- The quality and relevance of technical and scientific research needs to be improved.

Recent changes in research funding are intended to provide incentive systems that will help stimulate R & D through change from central and institutional funding to the development of contract research mechanisms and project choice based on peer group review. Production and research managers alike must learn to reduce risk aversion—because of conservatism and lack of incentives, the Chinese system of S & T has been wasteful, rigid, and not as productive as it could be.

China has developed complex and expanding ties with the international technical community and has introduced new approaches to R & D. The strategy for S & T modernization has been to simultaneously treat the five institutional parts of China's research system: the Academy of Sciences, Institutions of Higher Education, production ministries, national defense research institutions and local science and technology departments. The separation of these institutions currently acts as an impediment to development; improved communication and stimulation are needed to create a dynamic environment. The establishment of super-ministries may help to coordinate S & T at the top but, since local participants possess 80% of the resources needed to stimulate modernization, increased communication must be fostered at the local level as well.

2. Better Use of Foreign Technology

Expanded imports of Western technology and increased contact with the international scientific community could raise additional issues that will have to be resolved. Western imports of science and technology may have a serious impact on the Chinese political system; modern, dynamic science and technology has an inherently pluralizing effect on a controlled political system. Specific problems in transfer of technology such as patent copyrights and systems must be addressed as well.

3. Improved Scientific Cadres

It is important to develop a sufficient scientific and technical manpower pool within the new generation of Chinese students. Unlike the previous generation which was sent to the work bench and commune during the Cultural Revolution, the new generation finds itself in the throes of

an explosion of educational opportunities as well as uncertainties. Pragmatic training as scientists, engineers, and managers has replaced the ideological requirements as the foremost prerequisite for success; the achievements of Chinese youths will now be measured in considerable part by their ability to effectively adopt Western methods and adapt them to Chinese needs.

Thus, to a large extent, scientific and technological modernization will depend on effective reforms in the advanced educational system which, in turn, will help determine how wide the opening to the West must be. Already, the modernization of science and technology has led China to reach abroad with the presence of over 12,000 Chinese students in U.S. higher educational institutions. Although the current system is elitist, it does provide upward mobility, even for rural youth. Equality of opportunity has explicitly replaced equality of reward, although differentiation in the social system and change in the political culture may go beyond the bounds of what is acceptable to future leaders.

D. Military Modernization: The Fourth Modernization 15/

Modernization of the military is underway as well, but remains the fourth modernization. The continued low priority of military modernization is in tune with the generally non-military character of the non-Communist, Pacific region. Thus "guns" are characteristically submerged to the claims of "growth" and "butter" in the reorganization and restructuring in Chinese military modernization.

1. Reorganization of the Chinese Defense Support Establishment

- The short-term objectives of defense modernization are aimed at improvement in combat readiness of forces through adaptation of combined arms operations; improvement in the technical and professional skills of the officer corps; and creation of monetary incentives keyed to improved professional performance.

- The long-term objectives may be served by improvement in the scientific and technical base, making it capable of developing and producing weapons based on modern technology; and by the development and deployment of strategic systems which provide a more credible nuclear deterrent.

PRC military expenditures are exceeded only by those of the U.S. and U.S.S.R. and the Chinese defense industrial base is among the world's largest; nevertheless, the burden of defense has not offset or seriously retarded civilian modernization. Defense allocations have not increased

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15/ See articles by Godwin, Paul H.B. Overview: China's Defense Modernization; Parris, Ed. Chinese Defense Expenditures, 1967-83; Sutter, Robert G. Chinese Nuclear Weapons and American Interests--Conflicting Policy Choices; and Dreyer, June Teufel. The Role of the Military in the Chinese Economy. In China's Economy, II.

appreciably since 1972, except for a modest increase to fund the Vietnam invasion of 1979. Still, military modernization will in time represent a major overhaul of the defense establishment. Although some external assistance will be needed, the primary objective is to develop a self-sustaining defense infrastructure.

2, Military Manpower and Readiness

The traditional multi-functional role of the armed forces in the Chinese economy and society has been maintained with continuing attention to its symbolism, even when the substance of resources for priority modernization has been lacking. Upgraded military modernization always threatens other modernization efforts:

- o Growth needs may create hard choices in military modernization, particularly if the external threat increases and the security requirements are upgraded.

- o Perceived threats or opportunities in the external environment, e.g., in dealing with the Soviet Union, Vietnam or Taiwan, may lead Chinese leaders to upgrade military modernization, a development which would tend to generate further threats within the region in an escalating process.

3. Military Reform in the Regional Context

PRC defense modernization presents opportunities and risks for U.S. interests:

- o Offsetting the increases in Soviet power in Asia is consistent with U.S. interests.

- o However, the Chinese might use political-military power in Asia at the expense of U.S. interests, raising the threat, for example, of a forceful solution to the Taiwan question.

E. Openness of the Economy to the World Market 16/

China is becoming involved in the international economy at an unprecedented rate, opening its economy in a fashion unparalleled by the development of any

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16/ See articles by Woodcock, Leonard. Overview; Davie, John L. China's International Trade and Finance; Noyes, Helen Louise. United States-China Trade; Falkenheim, Victor C. China's Special Economic Zones; Sutter, Robert G. Hong Kong's Future and Its Implications for the United States; Pelzman, Joseph. PRC Textile Trade and Investment: Impact of the U.S.-PRC Bilateral Textile Agreements, and Economic Advantages to the PRC From Access to the U.S. Generalized System of Preferences; Lubman, Stanley B. Equity Joint Ventures in China: New Legal Framework, Continuing Questions; Nanto, Dick K. and Kim, Hong Nack. Sino-Japanese Economic Relations; and Copper, John F. China's Foreign Aid Program: An Analysis and Update. In China's Economy, II.

other Communist country. As recently as 1970 the People's Republic of China was isolated from the global economy. In the 1980s, having abandoned its policy of autarky, China is opening its economy and society to spur modernization. Over its long history, China has been opened many times from the outside by West Europeans, Americans, Japanese, and Soviets interested in extending their sovereignty and expanding their trade. Now, under Deng Xiaoping, China is pursuing at least temporary interdependence with the developed Western economies on its own initiative and has invited in foreign economic and technical influence to help revolutionize its economic system and broaden accommodation with the global economy.

Seeking to become a major trading country in the Pacific, China has set a goal of tripling its trade with the United States. Moreover, China supplies modest economic aid and influence throughout the Third World, projecting its role as the largest socialist and developing country. By its success in selective emulation of the developed Western economies, China provides an effective role model to all the developing countries.

1. Role of SEZ - A Step Toward Openness

The Special Economic Zones (SEZ) created in the PRC have provided the meeting place for the centrally-planned, developing Chinese economy and the market economies of the developed West. Joint ventures, Western legal systems, Western management, and Western technology have not only been permitted into China but embraced. In this way, one of the world's oldest, most traditional societies has sought and successfully absorbed, in a relatively short time, important aspects of Western political-economic culture. Reflecting this dramatic change in Chinese openness to Western economic influences is the slogan of Shenzhen, the most advanced SEZ--"Time is money, efficiency is life."

2. Balance of Payment Constraints on Commerce

The People's Republic of China is projected to become a major actor in the Pacific region and in the global economy. However, rapid expansion of foreign commercial relations in the post-Mao period has led to periodic retrenchment, sharp cutbacks and adjustments. As a result, China's opening to and absorption in the world market have so far been uneven. Commercial growth projections are subject to a variety of tenuous assumptions and considerations:

- Long-term growth in commercial relations is tied to the Chinese ability to export--especially hard currency-earning sales of offshore oil.

- Ineffective industrial accommodation to joint ventures has restrained the absorption of foreign technology, especially transfer through the Special Zones to domestic economy. Foreign intervention in domestic Chinese decision-making may not prove to be in Chinese interests and may revive latent xenophobia.

- Substantial credit potential and full use of the foreign direct investment inherent in close commercial ties has not been forthcoming.

Nevertheless, China's modernization and its opening to the world economy offer opportunities and challenges to the United States; U.S. policies may promote or impede PRC developments:

- Diversification and expansion of global Chinese commercial relations is a part of an overall normalization process with East and West. A shift in the structure of trade from material exports to machinery, in time, is the Chinese objective.

- Japan has advantages of geographic proximity and cultural affinity to reinforce natural economic fit. Aggressive Japanese promotion strengthens this natural advantage.

- A major economic turning point in U.S.-PRC trade is tied South China Sea oil development.

- Textiles will continue to be a key export of China and threaten U.S. industry but may be a manageable problem area with U.S., especially with an amicable settlement of disagreement over the General Agreement on Tariffs and Trade (GATT), the Multifiber Agreement (MFA) and continued extension of Generalized System of Preferences (GSP).

Chinese leaders envision the PRC becoming a major trading country in the Pacific. If they are successful, the Chinese market would cease to be the mirage of the past and live up to its long-term promise. At the same time, development of Chinese economic power would permit China to excercise influence over political, military and economic affairs in Asia and throughout the world, a role that would not necessarily be consonant with U.S. interests.

3. Reaction and Resistance to Openness

While foreign technology and technicians aid modernization and generate exports, they also compete with and replace elements of the domestic economy in an uneven pattern. Negative effects of openness and renewed xenophobia may lead to retrenchment and revision of openness.

F. Assumptions Underlying Continued Reform and Growth

Having highlighted (with the assistance of the new study of China's economy) the achievements of and obstacles to Deng's four modernizations and opening of the economy, what is the likely path of China's economic development during the rest of the century? China's experience in the last decade suggests that the trend toward modernization and improved performance will continue, but not without some variation in approach and in results. Implicit

in this scenario are a series of assumptions that would affect overall performance; each of the assumptions below suggests issues that China's leaders will need to address and which, while not reversing the positive direction of improving economic performance, may require some diversion from the planned straight line of growth. Should these assumptions not be borne out over the course of the next decade, China's modernization may fail, leading to slowed growth and the retardation of development; or, one of the other two scenarios described above—Maoist political cycles or steady advancement along a trend—may become more probable. For the present, however, a continued variable pattern of growth would appear the more likely expectation, given these assumptions:

(1) Political support of the principles of modernization, reform, and openness, required for Deng's economic policy, is likely to continue, even after Deng's passing. 17/

- o The framework of modernization, openness and reform has been broadly accepted, but the specific policies for proceeding through the various stages of change are still being worked out. To assure continuity of reform, political steps have been taken which are intended to stabilize the leadership and provide for smooth succession. Change after Deng seems likely to move toward a more orthodox Leninist political and economic system rather than a revival of radical Maoism.

- o While the system will not move toward pluralistic democracy, the Party and State may be progressively less obtrusive, and may intervene less in the professional processes of the economic system and its responsiveness to market stimulating forces.
differences in view.

- o Deng has been successful in eliminating the most obvious and vocal opponents and obtaining a strong consensus for the general framework of economic policies currently pursued. Surface consensus may mask a lack of resolution of fundamental differences in view. Future reform policies represent wide options consistent with the framework of reforms advocated and implemented by current Chinese leaders led by Deng. However, the consensus may break down as the leadership moves from general to specific policies in the post-Deng period.

17/ See articles by Harding, Harry. Political Stability and Succession; Hamrin, Carol Lee. Competing Political-Economic Strategies; and Clarke, Christopher M. Reorganization and Modernization in Post-Mao China. In China's Economy, I.

- The political succession strategy followed to date appears to be successful. That strategy has consisted of placing potential successors in key posts; reorganizing the Party and State institutions (including military) to provide solid bases of political support; convincing the Party of the need for reform; and reinstituting the Chinese political process to protect leadership from serious challenge and charges that reforms threaten economic stability, cultural integrity, and social equality. However, continuation of political support over the long run may fracture, particularly as the impact of specific reforms becomes evident.

- The changes resulting from accelerated economic growth and reform under Deng Xiaoping such as destabilization of the established Communist political economic system, diversification of culture and opening of the society, are less radical than the political-ideological changes instituted under Mao. The full cost of attaining economic goals by the year 2000 is substantial, though perhaps sustainable.

(2) Rural reform will not be overtaken by population pressure that may threaten to swamp production gains; or be offset by social pressures generated by income inequities.

- China hopes to stabilize its population at 1.2 billion, but it is more likely to grow to 1.4 billion before leveling off in the 21st century. The 200 million difference is critical to China.

- Draconian measures to control births through the demographically hazardous period of high fertility may come into conflict with the natural desire for more children.

- The cultural and social impact of increasing inequities and changing social status, resulting from progressively differential incentive systems, may be substantial. The economic restructuring or reform process may create an upper and an under class in rural and urban settings that could generate social and ideological backlash.

(3) Urban Reform will not be frustrated by an inability to choose between the short term political opportunities to move ahead directly toward guidance planning or the more cautious approach of developing a system of monetary and financial measures key to indirect control of management.

(4) Science and technology reform will not be neutralized by conflicts between central and decentralized models, lack of adequate cadres and slow absorption of foreign technology.

- The creation of a new managerial, scientific and intellectual elite may not be deemed sufficiently beneficial to justify its full social, cultural and political costs.

(5) External threats or opportunities will not reverse the modest priority for military modernization.

- o Soviet developments in Asia, especially in connection with Vietnam and North Korea, could destabilize the military balance and lead to changes in military postures.

- o Opportunities created in Taiwan by sucession or other developments may lead to upgrading military preparation if intervention is adopted as a policy.

(6) Opening of the economy may proceed as long as the adverse effects of foreign influences are not more than offset by the developmental benefits.

IV. IMPLICATIONS OF PRC MODERNIZATION FOR THE UNITED STATES, PACIFIC RIM, SOCIALIST COUNTRIES, AND LDCs THROUGHOUT THE WORLD

A. As a Nascent Asian Economic Power

In accomplishing its general goal of growth and modernization by the year 2000, the People's Republic of China will obtain the economic base in rural and urban output necessary to sustain its role as a rising power:

- o Per capita income increases will make it possible to provide an increasing share of the populace with an average diet assuring subsistence grains and quality foods, including meat and fish; consumer durables, such as washing machines, television sets, and motorcycles, will become commonly available for those peasants and workers with rising incomes.

- o The economic infrastructure--transport and energy networks, housing and commercial services--may be substantially improved, albeit from a very low base.

- o The PRC's resource base will be enhanced so that it may project its role as a regional power by supporting regional programs of economic assistance, military affairs, and foreign representation.

B. As A Participant in the Pacific Market

The PRC, with abundant and relatively cheap labor, energy and material resources, and with selective skills in many areas of competitive advantage possesses a potential for expanding exports. The country's ability to import -- a virtually insatiable appetite for produce, consumer durables and technology -- will be constrained by its ability to expand exports. Moreover, the development of other means of expanding its foreign economic activities, through the use of credit and joint ventures,

for example, will turn on the promise of future exports. Key areas of export development are led by energy--offshore and onshore oil, coal and possibly natural gas. Import requirements will be dependent upon the priorities of the four modernizations.

For advanced technology products, the PRC looks to the OECD countries. Japan's natural advantage in competitive high-technology products and its ability to effectively transfer technology may be tempered by a Chinese desire to diversify its import dependence. Some of the Newly Industrializing Countries, Taiwan and South Korea, are limited trading partners for political reasons, while the Asian-Pacific entrepreneurs--Hong Kong and Singapore--have a central role as direct and intermediary channels.

Participation in the foundation organizations of the world economic community--the International Monetary Fund and World Bank--provides stimulation to growth and adherence to norms of the free-world trading system. If China were to rejoin the GATT, these benefits would be further extended.

C. As a Model for Developing Countries

The size and growth of China may alone enhance China's attractiveness as a model for developing countries, but a number of particular features of China's development may also be of interest to the world's struggling LDCs:

- o Gains in industrial and agricultural growth that are not swamped by population explosions (Egypt, Bangladesh come to mind).
- o Growth without urbanization and its accompanying unemployment, overcrowding and unplanned urban explosions. [Latin American countries, such as Brazil and Mexico, as well as India come to mind.].
- o Manageable environmental pollution. [All developing countries seem to say growth now, quality of life later.]
- o Manageable employment, i.e. minimizing unemployment which can cause the dislocation of growth and the release of labor through technological change.

D. As a Model for Socialist Economic Development

Is it possible for a centrally-controlled society and economy to grow in quantitative and qualitative terms? Is simulation of market efficiency through selective decentralization and devolution of economic power to the enterprises and family plots possible? The tentative answer from the PRC, based especially on rural reform, is -- perhaps. The Soviet Union, East Europe and many other countries with centrally controlled economies watch Chinese developments with interest.

The Chinese experiment raises other questions as well. Can measures of economic efficiency be attained in a flexible Marxist-Leninist framework? The key to adherence to Marxist dictates is ownership. Are private and socialist ownership antithetical? Can socialist ownership, such as in the family responsibility system in Chinese agriculture, attain the advantages in efficiency of private ownership, while staying faithful to Marxist injunctions against the exploitative evils of private property? Some Chinese say yes, as do some East European ideologists.

Is a Leninist system--a flexible view of Lenin's commanding heights--a viable ideological construct for retaining both ideological and political purity and market simulating efficiency? Some would see these ideological discussions as just providing "fig leaves" for renunciation of Marxist-Leninism. Others would argue that these critics are too mechanical in their interpretation of the ideology.

However the flexibility of ideology is worked out, the political imperative, for China as well as the other socialist nations, is to retain the central role of the Party and the centralization of key political powers. The Party may nonetheless withdraw from its direct role as economic interventionist. This selected withdrawal of the Party would raise the question, however, of whether the role of the Party can be maintained if its tool for controlling appointments and personnel--the nomenklatura system--is eliminated or revised.

Political and ideological comity between China, East Europe and the Soviet Union may lead to substantial expanded trade. There is a natural fit between the economies of the PRC and the Soviet Union:

- o Chinese exports of food, textiles and other materials to the U.S.S.R., especially to deficient areas of Siberia.

- o Soviet exports of industrial equipment to the PRC to upgrade Soviet projects of the 1950s, assist in electrification, construction of railroads, as well as to provide key materials, such as timber products.

E. <u>As a Pacific Regional Partisan with the United States</u>

What would the United States prefer in Chinese development? An economically healthy, peaceful state that does not threaten the sovereignty of its neighbors or ally itself with the aggressive plans of the Communist countries of Asia (the Soviet Union, North Korea, Vietnam). Moreover, the development of expanding and mutually beneficial trade would add to the community of bilateral interests.

Chinese leaders include a doubling of bilateral trade in their objectives for the year 2000. Trade turnover has been reportedly expanding in recent years from $4.8 in 1980 to $7.7 billion in 1985.

Future economic development may turn on the development of large-scale joint ventures:

- o Oil complexes--offshore and onshore.
- o Coal mining and distributive complexes.
- o A comprehensive energy program, including hydro, nuclear, and electric power transmission.
- o A comprehensive transport system.